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Germany discovers Indonesia
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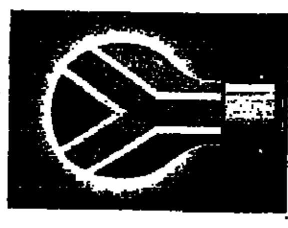

South Africa
Light into the darkness
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Management
In pursuit of the roving executive
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Information Technology:
Reviewing risk after Barings
Separate section

World Business Newspaper WEDNESDAY APRIL 5 1995 D8523A

Bank of England criticised over Barings inquiry

Hessel Lindenbergh, a senior director of Dutch bank Internationale Nederlanden Group, yesterday criticised the Bank of England for taking too long to complete its inquiry into the collapse of the merchant bank Barings. Mr Lindenbergh said that unless the bank produced initial findings by the end of this month, ING might start to dismiss the Barings executives it believed responsible. Page 15, Human rights blow for Leeson, Page 9, Lex, Page 14

Kohl to attend Moscow VE-Day event: German Chancellor Helmut Kohl will attend Moscow's official commemoration of the 50th anniversary of the end of the second world war after Russia agreed not to hold a militaristic victory march, officials said on Tuesday.

Claes vows he will not quit over scandal:

Willy Claes, Nato secretary general, said yesterday he had no intention of resigning over a kickbacks scandal, but acknowledged an "error of judgment" in the affair. "I see no reason for me to resign, I am innocent," Mr Claes said. He argued that he still enjoyed the confidence of Nato's 16 members and had received messages of support from many senior politicians. Page 14

Crédit Lyonnais chairman's warning: Jean Peyrelevade, chairman of Crédit Lyonnais, the loss-making French state bank, warned that any attempts to toughen the terms of the government-backed rescue announced last month might jeopardise the group's survival. Page 14; Lex, Page 14

Moscow securities house venture: Hans-Jörg Rudloff, the banker who built the modern euromarkets in the 1980s and led investment bank CS First Boston into eastern Europe, is setting up his own securities house in Moscow. MC, the securities firm which Mr Rudloff formed last year after leaving the CS group, is expected to announce a joint venture in the Russian capital. Page 15

Mexican plans frozen: Reichmann International and George Soros, the US financier, have frozen $1.25bn of property developments in Mexico City, which were to include the country's tallest building, in the wake of the peso's fall. Page 15

Many EU countries missing Emu targets: The European Monetary Institute, forerunner to a European central bank, cast doubt on the ability of some EU countries to achieve monetary union by criticising their high budget deficits and debt levels. The institute said EU countries had not made enough progress in economic convergence. Page 2

Further gains for Bertelsmann: Bertelsmann, the German media and publishing group, expects a "substantial" increase in profits for the year with a 9 per cent rise in sales to DM20bn ($14.6bn). Sales for the first half to last December rose 11 per cent to DM10bn. Page 16

Army hunt after Burundi massacre: Burundi's army said it knew of only 20 deaths from a reported massacre of Hutu tribespeople but said it was hunting for the attackers. Diplomats and aid workers reported some 400 people, mostly women and children, had been massacred in the northeast. Page 4; Editorial Comment, Page 23

La Générale raises earnings 27%: Société Générale de Belgique, the diversified Belgian holding company, increased net profits 27 per cent to BFr11.01bn ($390m) in 1994. The group expects to at least equal the result this year. Page 16

Moslem rebels kill 26: Moslem rebels in the Philippines killed at least 26 people and wounded 30 in a raid by land and sea on the town of Ipil on southern Mindanao island, police said.

Iranians protest at high prices: At least one person was killed and many wounded when police at Islamashahr, southwest of Tehran, clashed with Iranians protesting against high prices. The protesters set ablaze several public buildings. Page 4

Body Shop drops court case: British cosmetics chain Body Shop withdrew from Israel after failing to stop a local copycat chain from using its name and a lookalike logo. Faced with mounting legal costs, the company abandoned its case in a Tel Aviv court on trademark actions involving Israeli firms Body Shop Cosmetics and owner Fischer Pharmaceutical Industries.

STOCK MARKET INDICES

New York lunchtime		
Dow Jones Ind Av	4,185.01	(+16.60)
NASDAQ Composite	817.75	(-0.30)
Europe and Far East		
CAC40	1,882.77	(+18.77)
DAX	1,965.01	(+34.19)
FT-SE 100	3,188.1	(+45.0)
Nikkei	15,630.5	(+249.24)

US LUNCHTIME RATES

Federal Funds	6⅛%
3-mth Treas Bills: Yld	5.901%
Long Bond	103 7/32
Yield	7.351%

OTHER RATES

UK: 3-mo Interbank	6 11/16%	(6 23/32)
UK: 10 yr Gilt	100 23/32	(100 11/32)
France: 10 yr OAT	98.84	(97.79)
Germany: 10 yr Bund	102.12	(101.87)
Japan: 10 yr JGB	108.346	(108.546)

NORTH SEA OIL (Argus)

Brent 15-day (May)	$17.52	(17.34)

GOLD

New York: Comex (Jun)	$395.1	(393.8)
London: close	$391.9	(391.9)

DOLLAR

New York: lunchtime		
£	1.6	
DM	1.38355	
FFr	4.842	
SFr	1.13555	
Y	86.38	
London:		
£	1.605	(1.6169)
DM	1.3854	(1.3723)
FFr	4.8455	(4.8105)
SFr	1.1385	(1.123)
Y	86.485	(86.19)

STERLING

DM	2.2234	(2.2187)
Tokyo close:	Y 85.85	

Austria	Sch35	Greece	Dr400	Malta	Lm0.60	Qatar	QR13.00
Bahrain	Din1.250	Hong Kong	HK$18	Morocco	MDh15	S.Arabia	SR11
Belgium	BFr70	Hungary	Ft185	Neth	Fl 4.25	Singapore	S$4.30
Bulgaria	Lw100.00	Iceland	IKr220	Nigeria	Naira90	Slovak Rp	KSL60
Cyprus	C£1.10	India	Rs75	Norway	NKr18.00	S. Africa	R12.00
Czech Rp	CZK55	Israel	Shk7.80	Oman	OR1.50	Spain	Pta225
Denmark	DKr17	Italy	L3000	Pakistan	Rs40	Sweden	SKr17
Egypt	E£5.00	Japan	Y500	Philippines	Pso50	Switz	SFr3.60
Estonia	EKr 20	Jordan	JD1.50	Poland	Zl 42,000	Syria	S£50.00
Finland	FM15	Kuwait	Fils.625	Portugal (m'land)	Es230	Tunisia	Din1.500
France	FFr10.50	Lebanon	US$1.50			Turkey	L40,000
Germany	DM3.80	Lux	LFr70			UAE	Dh12.00

Markets regain their composure after central bank intervention

Dollar recovery spurs bond rally

By Philip Gawith and Philip Coggan

The US dollar yesterday recovered some of the ground it has lost in its recent record-breaking fall, following Monday's co-ordinated central bank support for the currency.

The increased composure of the dollar and US asset markets, and renewed hopes of a decline in European interest rates, helped prompt a rally in bond and equity prices in the UK and on the continent.

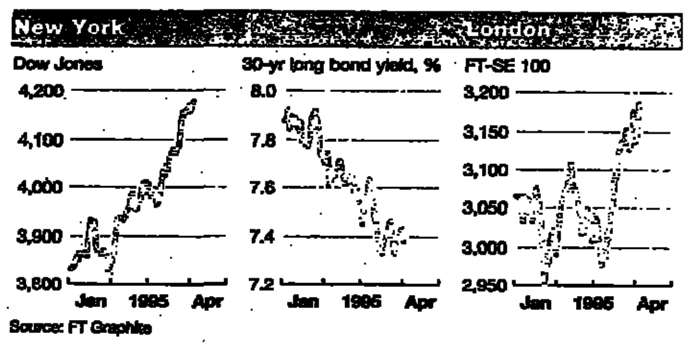
Markets have become more optimistic about the prospects for interest rates, particularly in Europe, since the Bundesbank cut two key short-term rates last week. Fears of rising short-term rates have been behind much of the weakness of bond and equity markets since the start of 1994.

The dollar finished in London at Y86.485, nearly a yen firmer than the post-war low of Y85.55 reached in late US trading on Monday, even though yesterday the US Federal Reserve stayed out of the market.

On Monday it was estimated to have bought $1bn-$2bn on the foreign exchanges. The Bank of Japan supported the dollar during Asian trading. The possibility of the Fed, and perhaps other central banks, buying dollars again was sufficient to curb aggressive selling, but analysts said the US currency remained likely to fall in the longer term.

Mr Tony Norfield, economist at ABN AMRO, the Dutch bank, said: "Neither chart patterns, nor central bank intervention, nor moves so far in official interest rates, offer any dollar support."

Many traders doubt the sincerity of the US authorities' recent statements in support of the dollar, including Monday's comment from Mr Robert Rubin, the Treasury secretary, that Washington favoured a strong currency.



Source: FT Graphite

WORLD MARKETS

"Sabre-rattling from the US is still very much the order of the day," said Mr Jeremy Hawkins, chief economist at the Bank of America in London.

Bond and equity prices rose on both sides of the Atlantic. In London, the FT-SE 100 Index rose 45 points, or 1.4 per cent, to 3188.1, its highest level of 1995. In Germany, the DAX rose 1.6 per cent in after-hours trading to 1,965.68, while in Paris, the CAC-40 index rose 1 per cent to 1,882.77. In the US, the Dow Jones Industrial Average was 16.6 points higher at 4,185.01, by 1pm New York time.

European bond markets also traded higher, with the strongest performances coming in Italy and Spain, which were helped by the strength of the lira and peseta against the D-Mark. German and French 10 year bonds were about a quarter of a point higher, and UK gilts were up by slightly less.

Software set to bedevil computer security

By Louise Kehoe in San Francisco

Satan, a devilish new computer program, will today be let loose on the Internet communications network, to the consternation of security experts globally.

Satan, which stands for "Security Administrator Tool For Analysing Networks", is a sophisticated but easy-to-use program designed to find security flaws in computers linked to the Internet. If it detects a weakness, it describes how it can be exploited.

The program makes it easy to penetrate the defences of an estimated 5m Internet-linked computers around the world, including corporate, academic, military and government machines. Satan can be used to spot and eliminate security problems. But it can also be used by hackers to break into computers to snoop through private files, plant viruses or do other mischief.

Any Internet user with a reasonably powerful personal computer will be able to copy the program free for their own use. Its creators, Mr Dan Farmer, a former computer security researcher at Silicon Graphics, the Silicon Valley computer workstation manufacturer, and Mr Wietse Venema, a security programmer at the Eindhoven Technical University, are determined to allow free access to Satan. They argue that this will force security on the Internet to be improved.

Computer security experts compare the software giveaway with supplying guns to children. According to Mr Donn Parker, of SRI International, a California research group that has tested the program, Satan "is going to end up in the hands of malicious hackers who will use it to break into computers without understanding the full impact of what they are doing".

According to Mr Parker, the program is the first step towards "automated hacking", in which computers attack each other. He envisages cyberspace wars, played out in the blink of an eye

Continued on Page 14
IT Survey, Section 3

Mazda halts some exports ■ Toray raises imports ■ Nintendo sees lower profit

Rising yen hits top Japanese companies

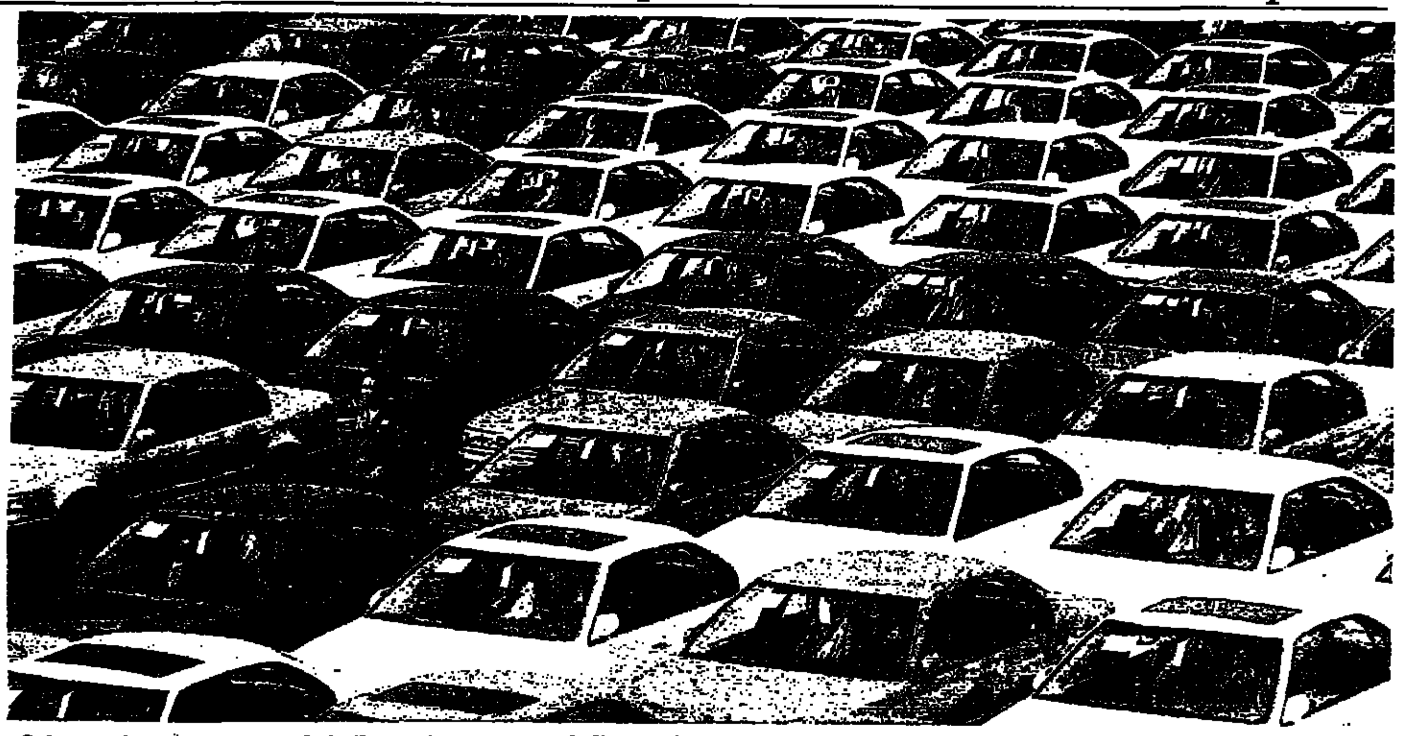
By Michiyo Nakamoto and William Dawkins in Tokyo

The problems faced by leading Japanese companies because of the surge in value of the yen was underlined by announcements from three of the country's top manufacturers yesterday.

Mazda, the car producer, is temporarily to halt production of vehicles in Japan for the US market. Toray, the synthetic fibres manufacturer, will increase its imports from south-east Asia. Nintendo, the computer games manufacturer, has failed to meet profit forecasts and is to focus on higher margin products for export.

Business has become increasingly anxious about the lack of government action to stem the yen's rise. Mr Norio Ohga, Sony chairman, has warned that at an exchange rate of Y80-Y90 to the dollar "it will never pay" to make products in Japan.

"We still make close to 60 per cent of our products in Japan because we believed doing so was the responsibility of Japanese citizens. But the present government has no strategy [in the face of the rising yen]. If the government cannot draw a blueprint for Japan in the 21st century, we shall have to shift overseas," Mr Ohga said.



Going nowhere: ranks of newly-built cars in storage symbolise the difficulties posed for Japanese companies by the yen's rise Picture: Glyn Genin

Loss-making Mazda blamed the strong yen and a sudden sharp decline in US car demand for its decision to cease Japanese production of cars for the US market for a few days.

The cut in output will be equivalent to 20,000 cars, one tenth of a year's US export sales, Mazda said. Two lines at Mazda's headquarters in Hiroshima will be closed at the end of this month, and two more at another plant in Hofu, west of Hiroshima, will probably be closed for "several days" in May, the official added.

A 15 per cent decline in US car demand has caused Mazda's stocks there to rise to the equivalent of 80 days' sales, 20 days more than the company deems acceptable. Mazda is severely exposed to the yen's rise, since 60 per cent of its Japanese production is exported, among the highest in the industry.

Nintendo said overall sales in the financial year to the end of March had increased, but, because of the yen's sharp appreciation, pre-tax profits would be nearly 7 per cent below previous forecasts. It expects to avoid the worst impact of the higher yen by focusing on higher margin products for export.

Nintendo said sales in the year to March would be about Y350.6bn ($4.1bn), 3 per cent higher than originally forecast although sharply down from Y467.1bn the previous year. But pre-tax profits would be only Y97bn compared with Y115bn the year before. The company, which ships from Japan most of the video games machines it sells in overseas markets, said the yen's rise would wipe about Y20bn off profits.

Toray, Japan's largest producer of synthetic fibres, plans to lift imports from its south-east Asian suppliers from Y10bn this year, just under 2 per cent of forecast sales, to Y100bn by 2000.

EU, Canada proposals on fish row rejected by Spain

By Caroline Southey in Brussels and David White in Madrid

Spain yesterday rejected draft proposals from the European Union and Canada designed to end the dispute over fishing rights in contested grounds off Newfoundland.

Mr Felipe González, Spanish prime minister, insisted Madrid would not be able to accept the deal because it would involve a large cut in Spain's catch in the disputed waters. Mr Javier Elorza, Spain's ambassador to the EU, delivered a note rejecting the proposals to the European Commission.

EU and Canadian officials yesterday afternoon resumed their talks, which have centred on the allocation of a 27,000-tonne quota for Greenland halibut, or turbot, set last November by the Northwest Atlantic Fisheries Organisation, an inter-governmental body which oversees fishing in the region. The discussions also cover tighter monitoring procedures and Canadian claims to jurisdiction over waters outside its 200-nautical-mile territorial zone.

The row blew up a month ago after Canada seized the Spanish trawler Estai. It later released the vessel but kept part of the catch.

Spanish officials said they remained hopeful a deal could be reached. But Spain could not accept that Canada, having violated international law by seizing a Spanish vessel outside its territorial waters, should come away from the negotiations with a large increase in its annual catch, they said.

A Canadian official said the two sides "had the outline of an agreement on Tuesday night but did not have a deal".

A Commission official said negotiators "still have not closed the gap on figures but we believe the gap can be bridged".

The proposal that the EU and Canada should each be allocated 10,000 tonnes of Greenland halibut out of a total quota of 27,000 tonnes would imply a reduction of about 80 per cent for the Spanish trawler fleet on last year. Spain objects in particular to a proposal for a "box" reserved for Canadian fishermen in international waters, which it sees as a dangerous precedent that could affect other fishing grounds. It is also insisting on what it calls a "restoration of international legality" – including the return of part of the Estai's catch.

"If there is going to be a deal there has to be a more equitable share out," a Commission official said. He added that Canada had to realise how important the quota issue was to Spain and that "further concessions have to be made".

EU officials said negotiators were pursuing a deal that could be accepted by all member states, including Spain.

EU ambassadors are expected to review the negotiations at a meeting today, ahead of a meeting of fisheries ministers tomorrow.

Fish may hinder SDP plans on Iceland's pro-EU voters, Page 3

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LONDON · PARIS · FRANKFURT · STOCKHOLM · NEW YORK · TOKYO

Long way to go on economic convergence, European Monetary Institute warns

Many EU countries missing Emu targets

By Andrew Fisher in Frankfurt

The European Monetary Institute, set up as the forerunner to a European central bank, yesterday cast doubt on the ability of some EU countries to achieve monetary union by criticising their high budget deficits and debt levels.

In its first annual report, the EMI said EU countries had not made enough progress in economic convergence ahead of proposed European monetary union (Emu) in 1997.

In unambiguous language – seemingly directed at politicians more than central bankers – the EMI says member states which are already well off convergence targets will be missing an opportunity if they do not use the present economic recovery to correct budgets and debt levels.

The EMI's job is to prepare for economic and monetary integration by laying the groundwork for a European central bank, recommending monetary policies and assessing the readiness of members states for Emu.

The institute does not say in its report whether it thought governments would decide to go ahead with Emu in 1997, but made clear there was far to go before this was achievable.

In fact, for Euro-optimists who still hope Emu can begin as early as 1997, the EMI report brings a dose of reality. So few countries meet the entry criteria laid down by the Maastricht treaty that even *1999* could well be a difficult target. In a nutshell, its verdict on the last point is: "Must do much better".

The EMI takes a stern line on what it sees as shortcomings of EU-wide policies, welcoming progress on inflation but showing strong concern about fiscal laxity.

Mr Alexandre Lamfalussy, EMI president, singled out fiscal policy for criticism in his foreword to the report. "Public finances in many member states continue to be a cause for serious concern," he said. "Finance ministers certainly recognise that this cannot go on – Maastrict or no Maastricht. Decisive action will be necessary to reduce budget deficits and to restore acceptable levels of public debt."

The report said most countries would not qualify for monetary union, "in the majority of cases because of their *fiscal positions*".

With 1997 the target for Emu under the Maastricht treaty, the first assessment of convergence will be made next year by the EMI and the European Commission. But Mr Lamfalussy has said the 1997 date is unrealistic.

The report was positive on inflation, though some countries' rates were still too high. The risks of inflationary pressures could increase as economies recovered from recession, it warned.

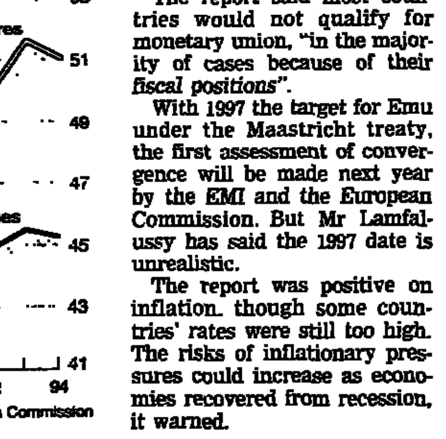
EMI: some countries 'must do much better'

General government gross debt *as a % of GDP*

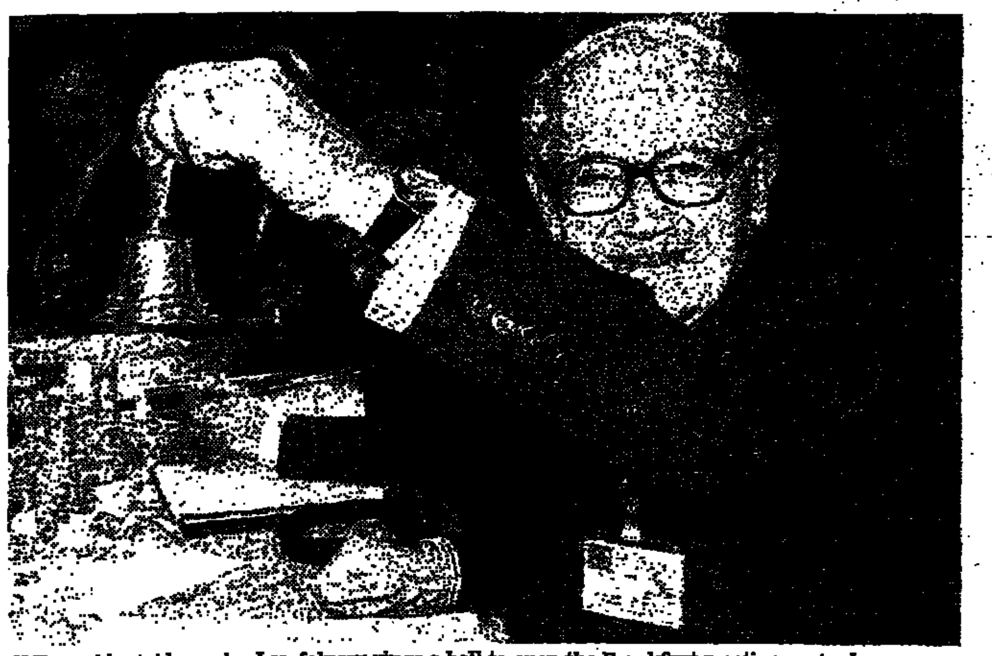
Maastricht Treaty criterion is 60%

	1992	1994 provisional	1996 forecast
Belgium	133.8	140.1	136.0
Denmark	68.8	78.0	78.2
France	39.6	50.4	55.8
Germany	44.8	51.0	58.9
Greece	92.3	121.3	128.1
Ireland	93.4	89.0	79.1
Italy	108.4	123.7	128.8
Luxembourg	6.0	9.2	9.9
Netherlands	79.9	78.8	78.0
Portugal	61.7	70.4	72.3
Spain	48.2	63.5	66.1
UK	42.0	50.4	53.1

Public revenues and expenditures *in the EU as a % of EU GDP*



Source: European Commission


EMI president Alexandre Lamfalussy rings a bell to open the Frankfurt meeting yesterday EPA

The EMI, based in Frankfurt, said progress towards price stability and increased convergence in some other areas had been reflected in greater exchange rate stability in 1994. But deficiencies remain. "It appears that the overall achievements in convergence *are still insufficient*."

Under the Maastricht treaty, countries entering Emu must fulfil strict criteria on inflation, interest rates, budget levels and debt.

"Several countries still record unsatisfactory levels of inflation rates and convergence is still not established firmly enough to discourage challenges to policy from developments on the foreign exchange and bond markets," the report said.

The EU's biggest economic problem continued to be "the worrisome state" of most countries' fiscal positions. Governments were taking corrective measures, but "these need to be strengthened and continued on a permanent basis".

Convergence would also be more sustainable with greater progress on improving the structure of labour and goods' markets. The report did not single out countries for criticism or policy recommendations, but detailed their performance under the criteria.

In 1994, only three of the then 12 member countries met the target of a budget deficit of 3 per cent of GDP – Germany, Ireland and Luxembourg. Only Germany, France, Luxembourg and the UK kept their public debt below 60 per cent of GDP, as laid down in the treaty.

Welcoming EU members' efforts to achieve price stability, the EMI said the average EU inflation rate of 3 per cent last year was still too high. France, Denmark and Luxembourg had the best inflation record, with annual rates of around 2 per cent.

They were followed by Belgium, Ireland, the Netherlands, the UK and Germany. The treaty says inflation rates should be no more than 1.5 percentage points above the three lowest-inflation EU states.

The EMI exhorted countries not to slacken efforts on inflation and said monetary policy needed "vigilance". As growth revived, wage deals should be moderate, companies should continue productivity efforts and governments should cut structural budget deficits.

Belgrade enforcing embargo against Bosnia Serbs

By John McKay in Sremska Raca, Serbian-Bosnian border

Serbia is carrying out effectively the embargo on strategic supplies at the land border into the 70 per cent of Bosnia controlled by rebel Serbs, monitors at the border confirmed yesterday.

One western monitor who has been checking traffic at the crossing for five months said: "I haven't seen a single round of ammunition. The only military equipment I have found are pairs of boots. They [the Serbian security forces] are doing a good job here. The rest of the team in other areas says the same."

However, UN sources say that helicopter traffic between Serbia and Serb-held Bosnia – which is monitored by Unprofor, the UN peacekeeping force, rather than the 162 personnel of the international conference on former Yugoslavia – has not been so well implemented. UN officials have not denied reports that at least three cross-border flights from Serbia two weeks ago could not be identified as permitted medical evacuations.

Diplomats also speak of isolated incidents of smuggling strategic supplies such as fuel at the border. There have also been reports that the shipment of strategic supplies has been going through Serb-held parts of eastern Croatia, which are not monitored by the international conference on former Yugoslavia.

Belgrade offered to implement the embargo last August to demonstrate to the five-nation Contact Group that it was not giving material support to the Bosnian Serbs' continued involvement in heavy fighting. A report will be presented to the UN Security Council on April 21, the end of the second 100 days of Belgrade's implementation of its border measures, and the council will rule on the effectiveness of the land and air restrictions.

The checks are in force at 17 crossing points and two railway stations. The Sremska Raca crossing, 100km west of Belgrade, is used by 80 per cent of all traffic going in both directions between Serbia and Serb-held territory in Bosnia. Yesterday, the traffic into Bosnia over two hours consisted of a United Nations relief convoy, several cars carrying civilians and three civilian trucks, which had been inspected and sealed by international monitors before leaving Belgrade and which were carrying cargoes for humanitarian use.

However, the traffic out of Serb-held Bosnia consisted of an unusually high number of civilians, possibly caused by the deteriorating security situation in northern Bosnia around Mount Majevica, some 40km across the border, officials said.

Problems piling up in my Nato in-tray, says Claes

By Bruce Clark

Whether or not Mr Willy Claes, the secretary-general of Nato, convinces the world that he is above reproach in the 1988 Belgian government Agusta kickbacks scandal, he does sound convincing when he speaks of the gravity of the problems faced by the alliance.

In a 90-minute interview with a small group of journalists, Mr Claes bluntly acknowledged that a host of unresolved issues was piling up in his in-tray: relations with Russia, new models for US-European co-operation, and bitter quarrels between Greece and Turkey.

The latter, he disclosed, had become so serious that it had paralysed the approval of Nato's 1995 military budget. The temporary financing which Nato is using to pay salaries at its military headquarters, and start preparations for a possible withdrawal from Bosnia, would run out at the end of June unless some solution to the impasse was found.

The latest Turkish-Greek impasse reflects a dispute over the personnel and responsibilities of two commands which the alliance is in the process of establishing in Greece, at Larisa and Salonika, and Turkish insistence that its aircraft based at the port of Izmir should not be dependent on Greek consent for the right to fly over the Aegean.

Mr Claes, who recently cancelled a trip to Athens and Ankara because of bad health, said he was still determined to go.

"I believe there is some possibility of finding a compromise over command structures," he said, while admitting that "at the moment we are not doing well" in reconciling the two sides.

On relations with Russia, which has objected strongly to US-inspired plans for the expansion of Nato, Mr Claes struck a conciliatory note – although the concessions he suggested fell far short of Moscow's most recent stipulations.

The secretary-general hinted that it might be possible to meet Russian demands for a de facto restriction on the forces deployed on the soil of new Nato members.

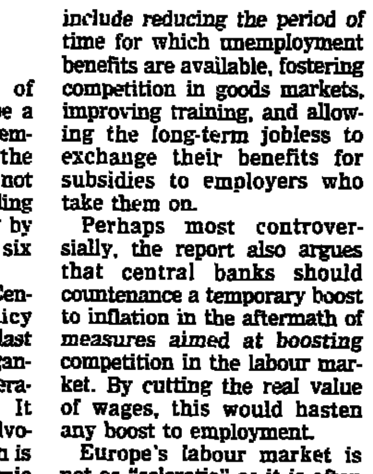
"Just because you are a full member of Nato it does not automatically mean that foreign troops or nuclear weapons are stationed on your territory," he said.

He said "a lot of different formulae" for relations with Russia had been floated by western governments in recent weeks, including a new Russia-Nato treaty, non-aggression pact or consultation mechanism. "All these can be examined," he said, disclosing that a "brainstorming group" on links with Russia had been established at Nato headquarters two weeks ago.

Mr Claes suggested that moves towards enlargement and the mapping out of a new relationship with Russia could be pursued simultaneously. However Russian officials have said recently that a new Russia-Nato relationship must be put in place before Moscow even considers lifting its objections to enlargement.

Acknowledging widely varying levels of enthusiasm for enlargement within the alliance, Mr Claes said it was impossible to say whether Nato would be ready by the end of the year to start naming prospective new members.

"Do not ask me to predict what will happen in December, I cannot give you an answer."


Claes: "Nothing to hide"

Asked about Russian threats to abrogate the treaty on Conventional Forces of Europe, Mr Claes said the accord could in principle be revised during a new round of negotiations which is due to start in 1996; but before that Russia should fulfil the treaty in its existing form by late 1995, as scheduled.

He gave a downbeat assessment of efforts to work out a new model for military co-operation between the US and Europe, which were launched at Nato's January 1994 summit. "Speaking frankly, we are not making a lot of progress," he said.

Mr Claes indicated that he had some sympathy for the US viewpoint over such co-operation. In a long-running dispute with France, Washington is insisting on retaining some say over any European military missions that use Nato equipment, even if the US is not directly involved.

Mr Claes said "a lot of progress" had been made in refining Nato's plan for a massive operation to oversee a possible UN withdrawal from Bosnia. He said Nato's military authorities were very satisfied by the responses they had received from all 16 members of Nato to their request for help with the operation, which could involve the deployment of up to 40,000 troops.

However he acknowledged that in at least some Nato member states, the final despatch of troops to Bosnia could not be guaranteed until national parliaments had debated the issue. "You can never speak of a finalised withdrawal plan," Mr Claes said.

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Study supports labour regulations in Europe

By Robert Chote, Economics Correspondent

The wholesale removal of labour regulations would be a naive response to high unemployment in Europe, as the cost of such restrictions is not as high as it looks, according to a report published today by leading economists from six countries.

The report for London's Centre for Economic Policy Research takes issue with last year's jobs study by the Organisation for Economic Co-operation and Development. It argues that the OECD's advocacy of US-style deregulation is sensible neither on economic nor on political grounds.

The study nonetheless opposes minimum wages. In countries where minimum wages are already enforced, the study argues that they should not apply to young workers and that their value should be reduced relative to average earnings.

Other recommendations include reducing the period of time for which unemployment benefits are available, fostering competition in goods markets, improving training, and allowing the long-term jobless to exchange their benefits for subsidies to employers who take them on.

Perhaps most controversially, the report also argues that central banks should countenance a temporary boost to inflation in the aftermath of measures aimed at boosting competition in the labour market. By cutting the real value of wages, this would hasten any boost to employment.

Europe's labour market is not as "sclerotic" as it is often portrayed, the study argues. Jobs are created and destroyed at similar rates on both sides of the Atlantic and growth of income per head has been higher in Europe than the US since the early 1970s.

People in the US tend to move from work into unemployment and then back into work again relatively quickly, although many remain trapped in a succession of low-paid jobs.

In Europe, most move straight from one job into another, while the unemployed stay out of work for a relatively long time.

The study also challenges the idea that unemployment is high in Europe because unskilled workers there cannot compete with low-paid labour from East Asia, an argument advanced in the European Commission's competitiveness white paper.

The study argues that trade between the industrialised and newly industrialising nations is too small to have much impact on the structure of employment. Competition could be a problem for Europe in the future, with East Asia just as likely to compete for skilled jobs as unskilled ones.

Unemployment: Choices for Europe, CEPR, 25-28 Old Burlington Street, London W1X 1LB.

Italians to be offered banking without queuing

By Andrew Hill in Milan

Sportello is a dirty word in Italian. It means "counter", as in railway stations, banks and post offices. But for Italians it signifies that volatile mix of boredom, frustration and ill-temper which ignites when, after a long wait, they finally confront a cigarette-smoking official through half an inch of scratched perspex and are told to come back another day.

Now, at last, some of Italy's 1,000 or so banks are to give their busiest clients the opportunity to avoid the *sportelli* by introducing genuine telephone banking for the first time in Italy.

Banca Commerciale Italiana (BCI), privatised last year, announced yesterday that a new service – Comit On Line – would be launched on May 2, partly modelled on the example of telephone banks in the UK, France, Spain, Germany and the US.

The service should be a step forward from existing automatic banking services, which allow clients to dial in on touch-tone phones for basic information about their current accounts. Comit On Line claims it will be the first service manned by real people, who can carry out more complex transactions over the phone.

It is appropriate that BCI should be one of the first into the field, as big state-controlled banks were considered among the least efficient of Italy's many banks until the recent drive for modernisation and privatisation.

Comit On Line, on the other hand, is a complementary service, aimed at attracting busy professionals who cannot afford to waste time queuing to pay their electricity bill. There is no contradiction, apparently, in the fact that BCI's fledgling telephone bankers will be drawn from the same staff clients used to accuse of surliness when they faced them across the tills in their local branch.

No doubt BCI and its potential competitors also have their eye on the 8m or more Italians expected to own mobile telephones by the beginning of the next decade. They already use the ubiquitous *telefonini* to call friends from restaurants, theatres and open-air cafés: now they will also be able to irritate fellow diners by buying and selling bonds and negotiating mortgage repayments over the phone.

Comit On Line is hoping for about 160,000 customers within four or five years, but the competition will be hot on BCI's heels. Indeed, Banco Ambrosiano Veneto, the private bank which BCI tried unsuccessfully to buy last year, said yesterday it was considering the launch of similar service in early 1996. "We are treating telephone banking with a little more caution," said a spokesman sniffily.

EUROPEAN NEWS DIGEST

Finnish coalition to exclude Aho

Finland's new government began to take shape yesterday when the Social Democratic party, which won elections two weeks ago, said it aimed to form a coalition with the Conservatives as its main partner. The decision means the Centre party of Mr Esko Aho, prime minister for the last four years, will be excluded from power. Mr Paavo Lipponen, the Social Democratic leader, said he was also inviting the Leftist Alliance, the Swedish People's party and the Green party to join coalition talks.

Collaboration between the SDP and Conservatives would revive their government co-operation between 1987 and 1991 and, by enlisting the three smaller parties, Mr Lipponen could create a much stronger coalition, with 145 seats in the 200-seat parliament, and meet his objective of forming a broad-based government that spans much of the Finnish political spectrum.

Mr Lipponen, who wants the new government to take charge by mid-April, said the potential coalition partners had all accepted the need for FM20bn ($4.6bn) of spending cuts to reduce Finland's budget deficit and stabilise its rising debt. He has made the cuts his top priority. *Christopher Brown-Humes, Stockholm*

Balladur gaining ground

Mr Edouard Balladur, the French prime minister running for president, has overtaken Mr Lionel Jospin, the Socialist party candidate, according to a poll conducted by the Ifop agency and published in the weekly Express magazine yesterday. Mr Jacques Chirac, the mayor of Paris and Mr Balladur's fellow RPR party member, remains the frontrunner with 26 per cent of the vote, down 1.5 percentage points from the previous Ifop poll conducted a week ago. However, Mr Jospin's support among voters for the first round of the elections on April 23 slipped 3.5 points to 18.5 per cent, while Mr Balladur's rose 2 points to 20 per cent.

In the second round of voting between the two leading candidates, due on May 7, Mr Chirac would win 60 per cent of the votes against Mr Balladur – down 2 points on the result a week ago – and against Mr Jospin he would win by 56 per cent, up 5 points. Mr Jean-Marie Le Pen, the leader of the extreme right-wing National Front, polled fourth place at 13 per cent, up 1 point, while Mr Robert Hue, the Communist candidate, rose 1 point to 9 per cent. *Andrew Jack, Paris*

Bildt offers finance talks

Mr Carl Bildt, leader of Sweden's opposition Conservative party, yesterday proposed talks with the minority Social Democratic government to help resolve the crisis of confidence over the state of the country's finances. The krona has weakened sharply and interest rates have been driven up in recent weeks by concern that the government is not doing enough to cut the country's budget deficit, equal to 11 per cent of gross national product. Mr Bildt, prime minister between 1991 and 1994, warned that Sweden faced "exceptionally grave" consequences if it failed to change course.

His move came as Mr Ingvar Carlsson, the prime minister, broke a trip to the Baltic states to attend a key parliamentary debate on economic policy today. The Social Democrats are holding talks with the smaller Centre party to try to win support for new deficit-cutting measures to be presented in a supplementary budget this month. Swedish bond yields fell yesterday and the krona strengthened by 5 ore to SKr5.32 against the D-Mark, providing some respite from recent pressures. *Christopher Brown-Humes*

Ruling on Italian repayments

The European Court of Justice yesterday ruled that Iri and Eni, two Italian state holding companies, did not have to pay back L742bn ($437m) of state aid to the Italian government. The two separate cases related to illegal state aid paid in the 1980s to Alfa Romeo, the car maker, then a subsidiary of Iri, and to Lanerossi, a maker of synthetic fibre which was part of the Eni energy and chemicals group. The Commission outlawed the aid and demanded its repayment to the Italian state. After delaying, Finmeccanica – the Iri company which owned Alfa Romeo – repaid L615bn, plus L104bn of interest, to Iri during 1990 and 1991. Eni's Snam subsidiary carried out a similar operation.

However, the Commission claimed that the cash should have been paid back to the government itself rather than the two holding companies. The court ruled that the Italian companies were wrong to delay but did not demand a final repayment to the state by Iri, which is nursing net debt of L23,125bn at parent company level, and Eni. Alfa Romeo was sold to Fiat, the quoted automotive group, in 1987 before the original Commission complaint. *Andrew Hill, Milan*

Turkish inflation slowing

Inflation in Turkey continued decelerating in March, for the second month in succession. Retail prices rose by 4.1 per cent last month against 5.2 per cent in March 1994. Mrs Tansu Çiller, the prime minister, hailed the results, saying: "There will be big declines in May and June and this will continue in the following months." Inflation peaked at 24.7 per cent in April last year after a balance of payments crisis.

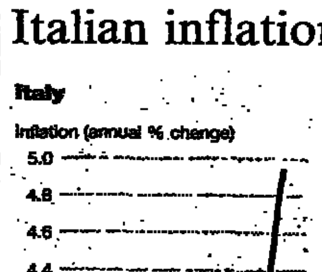
Economists expect the 12-month inflation rate, which hit 127.7 per cent in March, to drop abruptly next month, further lowering inflationary expectations, reducing interest rates and the government's borrowing costs and hence lightening the public deficit. The government aims to keep the deficit down to about $5.5bn this year. Independent economists say inflation is contained by a depressed economy and improved public finances, but many are concerned about the financial impact of Turkey's incursion into northern Iraq in March, which is estimated to be costing the treasury $1bn a month. Financial markets rallied on the figures, with the Istanbul stock exchange's share index breaking yet another record, closing yesterday at 43,090 points. *John Barham, Ankara*

ECONOMIC WATCH

Italian inflation hits 4.9%

Italy

Inflation (annual % change)



Source: Datastream

Italy's inflation topped an annualised 4.9 per cent in March, according to official figures released yesterday by Istat, the state statistics institute. The figure confirmed the sharp increase in inflation revealed by recent preliminary estimates for the country's leading cities, and compares with 3.8 per cent recorded in January and 4.3 per cent in February. The rise in consumer prices reflects the continuing depreciation of the lira against key currencies and new budgetary measures which came into effect last month. The rate is well above the 2.5 per cent projected by the Berlusconi government last autumn in its macro-economic projections for 1995. Most businessmen and economists expect inflation to rise above 5 per cent – the highest level in the European Union after Greece and Portugal. *Robert Graham, Rome*

■ Germany increased its trade surplus to DM8.8bn ($6.3bn) in January from a revised DM6.5bn in December, provisional figures show. Industrial factory gate prices rose 0.3 per cent in February from January.

■ The Austrian seasonally adjusted unemployment rate remained unchanged in March from February at 4.4 per cent, but fell slightly from a year earlier when it was 4.6 per cent.

■ Switzerland's consumer price index rose 0.1 percentage points to 1.6 per cent in March.

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NEWS: EUROPE

No-confidence vote may bolster the president's reformist hand

Deputies in Ukraine oust cabinet

By Matthew Kaminski in Kiev

Ukraine's parliament yesterday passed a no-confidence motion in the cabinet, but ministers will stay in their posts until President Leonid Kuchma nominates a new government.

Deputies in the fractious chamber voted, by 292 to 15, to force the cabinet's resignation in protest against the government's radical economic polices. Hardliners, frustrated by Mr Kuchma's control over policy, passed an accompanying resolution that labelled reform efforts taken in the past six months as "a failure".

Radical reformers, however, are believed to have backed the no-confidence motion to give Mr Kuchma a chance to clean out a cabinet rife with ministers opposed to economic change.

The impact on reform will be clearer tomorrow when parliament considers Ukraine's 1995 budget. The government must convince the chamber to approve a further 60,000bn karbovanets (£284m) expenditure cut and a revenue-generating tax package.

The International Monetary Fund last week delayed a board decision on Ukraine's $1.8bn (£1.12bn) stand-by loan until parliament passes a final budget with the agreed 7.3 per cent fiscal deficit. An IMF official yesterday called the collapse of the government "unfortunate" but expressed confidence that the now-acting government could get the budget through the chamber.

Some observers worry the recalcitrant parliament has now gained greater confidence to challenge Mr Kuchma. But the vote may – as the reformers in parliament hope – play to the president's advantage.

Mr Ihor Metiukov, deputy prime minister, said in a radio interview that the cabinet, now outside parliament's purview, would be able to implement reforms with less resistance.

In a state of the nation address immediately after the vote, Mr Kuchma did not mention the no-confidence motion and proceeded to set out an ambitious agenda for the coming months. "I'll accelerate radical economic reform irrespective of the political opposition," he said. "Without unpopular measures, our economy won't survive".

He repeated the call to speed up privatisation this year, devolve certain administrative powers to the regions, force bankruptcies, make the national bank fully independent, and overhaul the lucrative agricultural sector by cutting subsidies and transferring land to private farmers.

In his second significant address on the economy since the July election, Mr Kuchma again sought to reduce parliament's leverage in economic policy by proposing that any changes to the tax structure must receive two-thirds support in the chamber.

Western observers speculate the president might wait to adopt a "mini constitution", setting out strong executive powers and clarifying the ambiguous relationship between Ukraine's various branches of government, before replacing the cabinet.

Moscow keen to shed stake in big oil group

By John Thornhill in Moscow

Rosneft, the big Russian state oil company which accounts for more than a third of the country's output, is to be transformed into a joint stock company, it was announced late on Monday. The move signifies Russian commitment to creating an almost entirely privatised industry rather than preserving a state-owned national champion.

The government will retain a 51 per cent state in Rosneft for three years but seems intent on selling the remaining shares on the stock market. The final structure has still to be determined as the appendices to a presidential decree, which will detail how the industry's remaining assets are to be allocated, has not yet been published.

Rosneft, which originally included 282 enterprises spanning production units to gas stations to research institutes, was devised as a "hospital for sick companies" embracing all the assets which had not been parcelled out among the eight biggest privatised companies.

The decree incorporating Rosneft – which last year accounted for 130m tonnes of Russia's 315m tonnes of crude oil production – follows nine months of intense haggling over the industry's structure and appears to be a victory for the pro-market supporters in the government. Some oil industry executives had argued for the creation of a national oil champion along the lines of Aramco of Saudi Arabia or Pemex of Mexico. But Mr Sergei Belayev, head of the privatisation agency, in particular, had argued this would only entrench Rosneft's monopoly position.

Industry experts expect the company's management to exercise increasing independence – although the Ministry of Fuel and Energy, as the majority shareholder, will monitor performance.

But Rosneft has already won some lucrative concessions which could transform it into an attractive investment. The company will have exclusive rights to oil and gas extracted under production sharing agreements drawn up with foreign companies.

This could give it a share of several massive oil projects, including multi-billion dollar deals on Sakhalin island and in the Timan-Pechora basin.

The presidential decree also appears to clear the way for the consolidation of Russia's privatised oil companies. This will enable the holding companies to buy out the minority investors in their operating subsidiaries, although the terms have yet to be finalised. It also appears that Lukoil, one of the largest privatised companies, has won approval to incorporate Perneftegaz, which will bolster its output.

The decree also authorises the privatised oil companies to raise capital as long as the government's 45 per cent shareholding remains unchanged.

Mr Jerry Rohan, director of Price Waterhouse's oil and gas consultancy division, said the Rosneft move "means the end of the first phase of the Russian oil industry restructuring. All the holding companies have now been created. All the entities have been privatised. The next phase will be the corporatisation and integration of these companies. The industry can only benefit from that."

David Oddsson: side-stepped EU issue

Fish may hinder SDP plans to net Iceland's pro-EU voters

Iceland's Social Democratic party may be struggling against a political climate as chilly as the icy winds still whipping snow about the barren hills around Reykjavik. But it has not lost its appetite for a political fight.

In February, less than two months before this Saturday's general election, the SDP became the first Icelandic political party formally to support an application for membership of the European Union. With a majority of Icelanders against such a move, it was a bold initiative by a small party (unlike its sister parties elsewhere in the Nordic region) which is suffering the effects of a deep internal split and struggling in opinion polls.

Mr Jon Baldvin Hannibalsson, party leader and foreign minister in the incumbent coalition between the SDP and the bigger conservative Independence party, clearly hopes the decision will rally pro-EU Icelanders to the party. But it cuts across the issue that dominates the Icelandic economy and forms much of the core of political policy: fish.

The fishing industry in Iceland, a country of just 267,000 people, accounts for almost 80 per cent of exported goods and half of total export revenues. It contributes up to 20 per cent of GDP and employs about 14 per cent of the workforce. In the 1960s and 1970s Iceland fought tenaciously in "cod wars", chiefly against Britain, to establish exclusive control of and access to fishing grounds in a 200-mile wide zone around the island.

Membership of the EU would mean ceding sovereignty over the country's principal resource to Brussels and the EU's common fisheries policy. At a time of bitter internal and external EU battles over fish, that is a price most Icelanders refuse to pay.

"Iceland is the only independent, industrial nation that is so dependent on the exploitation of wild stocks of animals," says Mr Jakob Jakobsson, head of the country's Marine Research Institute. "As far as I understand the Treaty of Rome, we would lose control of the exploitation of this fundamental resource if we joined the EU."

Iceland cannot afford to ignore the deepening integration of Europe, a continent to which it is historically, culturally and economically tied. It joined the European Economic Area agreement with the EU in 1994, conceding only token access to its fishing grounds in the process.

Hugh Carnegy reports on a divided party's election gamble

Last year it appeared to be under growing pressure to square up to the issue of full membership when applications to join the EU by Austria, Finland, Norway and Sweden threatened to reduce the EEA to Iceland and Liechtenstein. But Reykjavik was effectively released from this pressure when Norway voted against joining the Union last November.

In the campaign for Saturday's election, only the SDP has made the EU an issue. Mr David Oddsson, prime minister and leader of the Independence party, has side-stepped it in his concern to bolster his party's position as the biggest single political party.

According to latest polls, he is in danger of losing out to a drive by four opposition parties of the centre-left (including an SDP breakaway group) to break up the Oddsson-Hannibalsson coalition and force the Independence party out of government.

The irony of the fish issue in Iceland is that the country has not been very successful in looking after its jealously guarded fish stocks. Total stocks of cod in Icelandic waters have plunged from almost 2.5m tonnes in the mid-1950s to just 600,000 tonnes today – about half of what the Marine Research Institute would like to see as a sustainable level. Only in the last two years has the government begun to cut back hard on cod quotas in a belated effort to rebuild stocks.

Icelandic fishermen have been successful in compensating for falling cod catches – cod quotas have now been cut to near 150,000 tonnes a year from 250,000 tonnes in 1993 – by netting other species, such as capelin and shrimps. They have also sailed to foreign waters, prompting Norwegian objections by fishing in the Barents Sea much as Spanish trawlers have clashed with Canada over fishing off Newfoundland.

Over the past decade the total annual fish catch has remained stable at about 1.5m tonnes. But it is unlikely to grow much. Although fish will remain the core of the Icelandic economy for the foreseeable future, manufacturing industries, based on Iceland's cheap hydro and geothermal power, and tourism are likely to be the main sources of growth, with Europe as the main market and partner.

The SDP argues that, while Iceland should seek a special deal with the EU over fish, membership of the Union is vital to securing the economic future of the country.

But in the election, this is strictly a minority view.

Bringing power to South Africa's people

Electricity utility Eskom is one bright note for the ANC, writes Mark Suzman

President Nelson Mandela admits that his ruling African National Congress has so far largely failed to meet its year-old campaign promise of providing a "better life for all" in South Africa. But one surprising state sector disclosed last week that it had exceeded expectations.

Eskom, the state-owned electricity utility, said it had surpassed its targets and electrified more than 250,000 black households during 1994.

With Eskom's black customer network expanding at an even faster rate this year, Mr John Maree, its chairman, is confident that the company's target of a further 1.5m new connections by the end of 1999 will be met. For millions of people who previously used firewood for cooking and candles for light, the arrival of electricity provides an immediate, tangible improvement in their quality of life.

To a cash-strapped administration which recently admitted it had been able to build fewer than a thousand of a promised 200,000 new houses last year, the giant utility's announcement came as a welcome tonic.

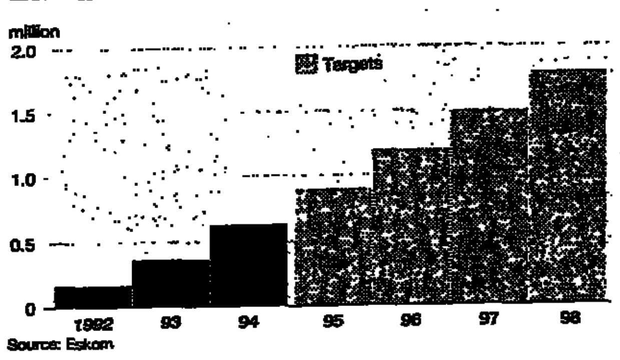
Even better the electrification project, which costs more than R1bn (£171m) a year, is being funded entirely from Eskom's own resources.

While the programme, one of the main thrusts of the government's centrepiece reconstruction and development programme, may be the most prominent part of Eskom's contribution to the new South Africa, the company is also on the cutting edge of several other critical issues.

Along with many local authorities, Eskom was a victim of the rent and service boycotts which have debilitated management of black townships since the mid-1980s as hundreds of thousands of residents refused to pay their bills. The government has so far largely failed to reverse the boycott, but Eskom has struck upon a combination of carrot and stick to reclaim electricity payments. By selectively cutting off electricity to non-payers in conjunction with launching a door-to-door community education programme, it has been able to boost payment levels from 20 per cent to 65 per cent since December.

Nearly 10 per cent of its managers are black

Eskom: new connections



Source: Eskom

More notably, Eskom's in-house affirmative action programme has long been regarded as one of the most comprehensive and successful in the country. Despite losing many of its newly trained recruits to private sector companies, nearly 10 per cent of managerial and supervisory positions are held by blacks, up from just 2 per cent at the start of 1991.

"There is a tendency to assume that affirmative action black advancement is synonymous with lowering standards. That's not our experience," insists Mr Maree, who notes that the company plans to have blacks forming 50 per cent of its managers by 2000.

Even more striking, this transformation from a parastatal dinosaur which aimed to do little more than provide easy jobs for whites while maintaining a steady electricity supply for industry, has been implemented without sacrificing profits or productivity. Mr Allen Morgan, Eskom's chief executive, said the company's net income for 1994 rose 32.6 per cent to R2.3bn while productivity increased by 5.2 per cent over the same period.

Due to massive expansion of its generating capacity during the 1970s most of which was never utilised during the economically lacklustre 1980s, Eskom has the luxury of being able to expand its consumer network without having to build new plants.

Meanwhile, already the world's second cheapest producer, Eskom is committed to cutting the real price of domestic electricity by a further 15 per cent over the next five years. This will give South Africa a tremendous, and desperately needed, international advantage in energy-intensive industries – a fact already paying dividends in the form of three multibillion-rand projects for the production of stainless steel and aluminium.

Eskom is making plans for expansion in southern Africa

With more than 50 per cent of the continent's electricity capacity (it is the fifth largest electricity company in the world), Eskom is also making plans for regional expansion. It expects to have a new power line up and running to Bulawayo in Zimbabwe by the end of next year and plans to rebuild the connection to the Cahora Bassa hydroelectric scheme in Mozambique by 1997. If there were no political obstacles, Mr Morgan reckons that Eskom could even set up a fully-functioning electricity grid encompassing the whole of southern Africa within five years.

While that particular goal probably remains some time away, the company's success is forcing the government to focus on a more achievable aim. With its good profit record, excellent prospects for growth, and total assets of some R47bn, Eskom is the jewel in the crown of state companies being considered for privatisation.

The ANC recognises the immense windfall revenue selling the company might generate, but remains reluctant to contemplate ridding itself of the one state institution reaping political and economic dividends. "The government is probably going to take a couple of years before it can persuade itself to part with Eskom," predicts one market analyst ruefully. In the meantime, however, the company will be ensuring that nearly a thousand black households a day can turn on an electric light for the first time.

INTERNATIONAL NEWS DIGEST

Algeria imposes restricted zones

Algeria, fearing Moslem militant sabotage of its key oil and gas industries, has imposed strict controls on movements within its energy production zones, Algerian radio said yesterday. The radio, monitored in Tunis, quoted an Interior Ministry order saying oil and gas production areas were now restricted zones.

"Movements of people and vehicles on roads passing through energy zones is limited to only national and foreign staff of companies whose activities are related to hydrocarbons (oil and gas) and to local inhabitants," the Interior Ministry order said. These categories of people and vehicles will receive a pass, it said.

Algeria for the past three years has been caught in a battle between the government and Moslem militants trying to overthrow the military-backed rulers. At least 40,000 people have been killed in the violence.

Traffic in the energy-rich desert *wilayas* (regions) of El Oued, Ouargla, Illizi and Laghouat will also be controlled, the order said. "The strategic importance of these zones for the country's economy imposes special measures to give security fields and the persons and goods contributing to their development," Interior Minister Abderrahmane Meziane-Cherif said in his order. Traffic from and to the borders with Libya will be limited to two routes. Those using them must register departures and arrivals with the authorities, the order said.

This latest measure comes after the Algerian newspaper Liberté on Monday reported that Algerian forces attacked near the border with Libya a convoy of Moslem militants transporting arms, apparently smuggled from Libya and Sudan. *Reuter, Tunis*

Iran police clash with protesters

At least one person was killed and many were wounded yesterday when police clashed with large crowds of Iranians protesting against high prices near Tehran. An angry crowd set ablaze several public buildings, government vehicles and a petrol station in the protest at Islamshahr, about 12 miles southwest of Tehran, witnesses said. Police helicopters fired teargas at lines of demonstrators that marched through several districts and attacked banks and shops, they said. A protester said he had heard that several people were killed but this could not be confirmed. AFP reported that at least 10 people had been killed. Protesters from neighbouring districts had gathered in the morning in Islamshahr, a working-class suburb of Tehran, to demand better fresh water supplies. Witnesses said the demonstration turned into a wider protest against economic hardships, including a doubling of fuel prices last month. Witnesses said the demonstrators, led by lines of young men and women, set fire to tyres on the main road which was later blocked by security forces.

In 1992, Islamshahr was the scene of protests when municipality demolition teams tore down more than 200 illegally built houses and shops. The doubling of fuel prices, approved by parliament, is the latest measure to cut subsidies while the relatively low price of oil, Iran's main export, keeps a lid on the revenue of President Akbar Hashemi Rafsanjani's (above) government. *Agencies, Nicosia and Tehran*

Burundi army says '20 dead'

Burundi's army said yesterday it knew of only 20 deaths from a reported massacre of 400 Hutu tribespeople but said it was hunting for the attackers. "There were around 20 dead but I don't yet have the definitive toll," Lieutenant-Colonel Jean-Bosco Daradangwe told Reuters after diplomats and aid workers said some 400 people, mostly women and children, had been massacred in Gasorwe in the northeast.

The United Nations said in Geneva it had unconfirmed reports of mass killings in two other villages in the east of Burundi. The UN refugee agency called on Burundi's government to provide better protection for Rwandan refugees living in camps, and appealed to Tanzania to reopen its border, closed on Friday after an exodus of 50,000 Rwandans from northern Burundi. Tanzania said it was sticking to its decision. *Reuter, Bujumbura.* See Editorial Comment

Imports increase in UAE

Imports into the three main trading centres of the United Arab Emirates rose in 1994 but both non-oil exports and the commercially significant re-exports declined, according to official reports compiled yesterday. Non-oil exports of the three centres – Dubai, Abu Dhabi and Sharjah – dropped 30 per cent to Dh4.5bn (£752m) compared with the previous year.

Figures for oil exports are rarely published and the trade of the other four UAE emirates is of little significance. The imports of Dubai and Abu Dhabi, the most active trade centres, rose by 8.3 per cent to Dh71.5bn in 1994 compared with Dh66bn in 1993. In Dubai and Abu Dhabi, where re-exports are crucial trade indicators, their value dropped 17.9 per cent to Dh11.3bn from Dh13.8bn in 1993.

Abu Dhabi, the wealthiest of the seven emirates, fared the orst in terms of exports. It fell to Dh252m in 1994, down 83.2 per cent from Dh1.5bn in 1993. Abu Dhabi introduced new rules last year excluding exports and re-exports from Abu Dhabi which were trucked to other UAE emirates. That could explain why re-exports also fell 30.5 per cent in 1994 to Dh694.6m. The oil-rich emirate's imports rose 24.6 per cent to Dh19.3bn, according to the emirate's Customs Department. *Reuter, Dubai*

Kenyan MPs arrested

Kenyan police arrested two leading opposition MPs yesterday after the government launched a fierce counter-offensive against Catholic bishops who denounced corruption and injustice. MPs Paul Muite and Kiraitu Murungi were picked up with four other people at the Nairobi offices of the Mwangaza Trust, a group banned by the government in February. "We have detained them here. But I cannot give any details [on what] led to their arrest," said a senior police officer at Muthangari, in the affluent Lavington suburb. The arrests came after the government accused the East African country's Catholic hierarchy of being in league with guerrillas and the opposition in a plot to overthrow President Daniel arap Moi's rule. Opposition MP and economist Peter Anyang Nyong'o said others arrested included Robert Shaw, a white Kenyan and economic commentator, and the head of the independent Institute of Economic Affairs, Maina Wachira. *Reuter, Nairobi*

Germans pursue green profit

German companies, combining environmental aims with the pursuit of profit, put their climate-protecting technologies on show at a trade fair linked to the United Nations climate conference. About 250 exhibitors, including Deutsche Bank, luxury car maker BMW, utilities, shipping companies and environmental groups, set out to show that green business is good business. Utilities demonstrated co-generation of heat and electricity, while car makers presented fuel-saving techniques and alternatives to petrol such as natural gas engines. Bankers discussed how environmental risk factors affect lending decisions and how companies can audit their own impact on the environment. About 2,500 German companies are active in the field, with combined annual turnover of DM55bn or 21 per cent of the world market, Mrs Angela Merkel, Germany's environment minister, said. US companies have a 16 per cent market share, and Japanese 18 per cent, she said, citing 1992 data. *Reuter, Berlin*

ASIA-PACIFIC NEWS DIGEST

Philippines alert as town attacked

About 100 people were killed when some 200 heavily armed bandits ransacked a southern Philippine town yesterday, robbing banks and stores and battling troops flown in to quell the insurgency. President Fidel Ramos ordered police and soldiers flown in by helicopter to "shoot to kill" the raiders.

Reports conflicted on the identity of the gunmen. Some police officers blamed the Moslem fundamentalist group Abu Sayyaf for the attack on Ipil, a town of 50,000 people about 760km south of Manila, but military officials said they were members of a "lost command" of the autonomy-seeking Moro National Liberation Front. Mr Ramos declared a state of emergency in Ipil and placed troops on the entire southern island of Mindanao on alert.

The gunmen arrived in boats, two buses and a truck, and some were waiting in position when the signal was given for them to raid four of the town's seven banks simultaneously at midday. *AP and AFP, Zamboanga, Philippines*

'Big money' protest in Seoul

The head of South Korea's sixth largest conglomerate joined the troubled ruling party yesterday, signalling the re-entry of big money into politics and triggering outcries of foul play from the opposition. Mr Kim Suk-Won, chairman of the Ssangyong Group, became a local chapter head for the ruling Democratic Liberal party as part of DLP efforts to stem a shift by voters to a newly created conservative group and independents in crucial elections in June to select mayors and governors for the first time in 34 years. The move underscored the DLP's anxiety over the local elections, which come when approval ratings for the ruling party are at the lowest since President Kim Young-Sam (above) took office in February 1993. *AFP, Seoul*

Japan deregulation welcomed

Sir Leon Brittan, the European trade commissioner, yesterday welcomed the economic deregulation plan unveiled by the Japanese government last week as "a step in the right direction". He said it showed that real progress was being made to improve foreign access to Japan's market, and that the authorities had sought to improve the transparency and implementation of their deregulation effort.

However, while Japan's programme met some EU requests for action, it did not go far enough. In particular, it failed to cover public procurement, an area which the Japanese government said was outside the scope of its deregulation plan. Nonetheless, the government had indicated that it was considering EU requests in this area and might respond to them in a separate document.

Sir Leon said that though the plan did not promise overnight changes, it reflected the Japanese government's commitment to pursuing deregulation in the longer-term. His comments, which sought to emphasise the positive aspects of the programme, contrasted with the more critical response of the US, which has described the proposed measures as disappointing. *Guy de Jonquières, Business Editor*

Cambodia concerned at riel

The Cambodian riel, once regarded as not being worth the paper it was printed on, has appreciated in value so much in recent weeks that the National Bank said yesterday it would intervene. According to official figures, the riel has appreciated by nearly 11 per cent to the US dollar since mid-March.

Following the introduction of new Cambodian notes on March 25, the riel has appreciated at a daily rate of nearly 2.5 per cent. Mr Thor Peng Leath, governor of the National Bank of Cambodia, said: "I am trying to stop more appreciation because, for the businessmen, too much is bad for imported goods." Mr Reza Vaez-Zadeh, senior representative of the International Monetary Fund in Phnom Penh, warned that a further appreciation could lead to an increase in inflation, which fell from 26.1 per cent in December to 18.5 per cent in January. *Reuter, Phnom Penh*

US backs Russian reactor deal

The US, anxious to smooth ties with Russia and keep a nuclear deal with North Korea on track, has suggested that Moscow could help furnish Pyongyang with non-military reactors. The move comes as US and North Korean diplomats take cautious steps toward establishing low-level ties and as Moscow says it will go ahead with a nuclear deal with Iran despite strong objections from Washington.

Ms Christine Shelly, State Department spokeswoman, said "Russia has signaled that it is interested by a share of that business" in North Korea, adding: "We'd welcome Russian participation."

Under terms of the October 1994 framework agreement, North Korea is to receive nuclear reactors that Washington hopes will come from South Korea. Ms Shelly said South Korea would remain the prime contractor, but that Russia was willing to take on some of the work. *AFP, Washington*

NZ chief whip resigns

The New Zealand government's chief whip yesterday resigned following disclosures that he had been calling radio phone-in shows masquerading as an unemployed Maori exploiting the social welfare system. Mr John Carter said Mr Jim Bolger (left), the prime minister, who was highly irritated by the affair, had accepted his resignation. The telephone calls were revealed at a time of increased racial tension as several Maori groups seized land and occupied it. Mr Carter said the calls were "intended to be a light-hearted prank" but had turned out to be an error of judgment. He intended to remain an MP.
AFP and Reuter, Wellington

■ New Zealand's production-based gross domestic product grew at an annual rate of 6.2 per cent in the December quarter, compared with 6.1 per cent in the previous three months. *Reuter, Wellington*

Hanoi says 3m died in war

Three million communist fighters and civilians were killed in the Vietnam war, according to a first toll of its kind given by Hanoi 20 years after the end of the conflict. The figure, reported by the official press, said more than 1m north Vietnamese and Vietcong soldiers and about 2m civilians were killed between 1954 and 1975. But the authorities emphasised the numbers were "incomplete". *AFP, Hanoi*

■ Mr Zahiruddin Khan, Bangladeshi industry minister, yesterday resigned from the cabinet of Mrs Khaleda Zia, prime minister, the United News of Bangladesh said quoting a government statement. *AFP, Dhaka*

■ *Correction:* Asian currencies
Two charts showing Asian currency movements in the Financial Times yesterday were incorrectly labelled. Movements depicted were Indonesian rupiah per yen and South Korean won per yen.

BJP to review power deal with US group

By Shiraz Sidhva in Panaji, Goa

India's Hindu revivalist Bharatiya Janata party, which heads the government in Maharashtra following state elections earlier this year, said yesterday it would place under review a $946.6m (£591m) power plant to be set up by Enron of the US near the state capital, Bombay.

The party's leadership, concluding a three-day policy-making national executive meeting in Panaji, capital of neighbouring Goa, said it would "not hesitate to throw out Enron" if it was found that other Indian or foreign power companies could offer a better deal through an open tender system.

The party stressed that though it welcomed foreign investment in infrastructure and high technology sectors, it would not permit the "unbridled entry" of foreign investors into the consumer goods sector.

Referring to the eviction of Coca-Cola and IBM from India in 1977, Mr Pramod Mahajan, party general secretary, said: "We may not throw out Coca-Cola, but we will not encourage investment in areas where Indian businessmen are capable of producing world-class goods".

The BJP is confident such a stance will not scare away potential foreign investors. Mr Jaswant Singh, leader of the opposition in the lower house of the Indian parliament, said: "We are a country of 900m English-speaking people with more political stability and a more reliable judicial system than most can offer.

"India is the investment (destination) of now, and the future".

In the largest single foreign investment deal since economic liberalisation in 1991, the Indian government and the then Congress government in Maharashtra state granted Enron the 695MW Dabhol project without any competitive tendering.

The project has become a test case for future foreign investment in India's infrastructure sector.

It will test the BJP's stand on economic reforms. India's largest opposition party, which hopes to form a government at the centre after general elections next year, took power in the recent regional elections in Maharashtra and Gujarat, the country's two most industrialised states.

Mr Jagdish Shettigar, a member of the party's economic "think-tank", said: "There is no question of rolling back reforms. We will accelerate the pace. We will introduce transparency in government to keep Indian businessmen from being swamped by foreign competition".

In Bombay, Mr Manohar Joshi, the Maharashtra chief minister, yesterday reiterated his government's resolve to increase foreign investment. "Our corrective measures against Enron Corporation should not deter other investors from investing in Maharashtra," he declared.

"We welcome investment from any quarter, provided there is transparency in the deal.

"The state government is committed to the policy of encouraging investment in the state."

But the Enron investment now seems in trouble. Mr Gopinath Munde, Mr Joshi's deputy, will head a cabinet panel to inquire into the financial aspects of the Dabhol power project, its environmental impact on the state, and the jobs it would provide.

"We will not hesitate to withdraw from the agreement with Enron to purchase power from them if we find the terms do not suit us," Mr Munde said.

Mark Nicholson adds from New Delhi: Mr Laloo Prasad Yadav, leader of the left-wing Janata Dal party, is due to be sworn in today for a second successive term as chief minister of the eastern Indian state of Bihar, following his party's victory in state elections.

The JD had won 154 seats by last night's count, with 304 of the 320 results declared in elections in India's second most populous and poorest state. The JD will rule in partnership with a number of smaller left-wing parties.

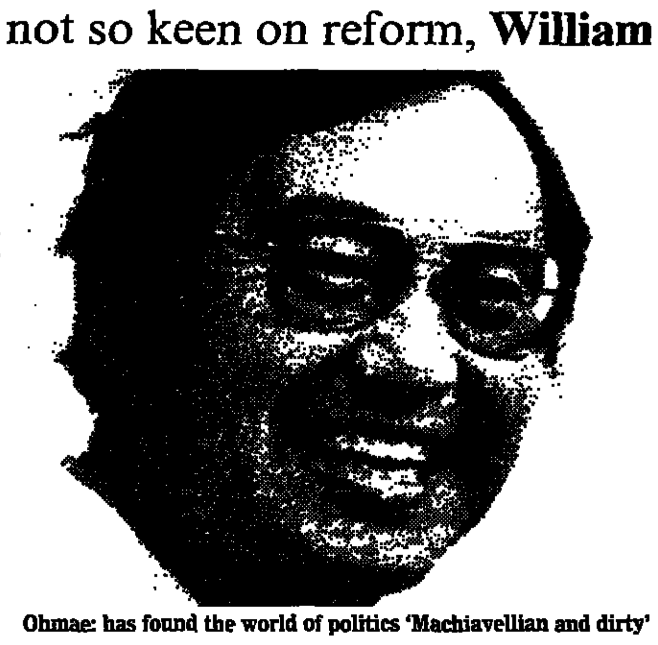
Counting in 11 constituencies has been suspended pending inquiries, while results in four were countermanded following the deaths of candidates.

The Bihar elections were postponed by India's Election Commissioner after widespread violence up to and during the first days of polling.

The central government imposed direct rule from New Delhi on March 28 to permit the state to operate during the interregnum. The BJP will form the opposition with 40 seats, while Congress won just 28 seats.

'Borderless guru' hits brick wall

Politicians are not so keen on reform, William Dawkins writes



Ohmae: has found the world of politics 'Machiavellian and dirty'

Japan's most famous management guru, Mr Kenichi Ohmae, is beginning to discover that the Japanese political world is less keen on reforming itself than were his corporate clients.

Mr Ohmae, 52, former chief of the Tokyo office of McKinsey, the US management consultancy, recently gave up preaching creative strategies to Japanese managers, to try to shake up the government.

To this end, he will stand for the governorship of Tokyo, the most senior Japanese political job decided by direct vote, in local elections on Sunday.

Early polls give Mr Ohmae scant chance of victory in a field of six, led by a former member of parliament and a retired senior bureaucrat.

The mixed progress of Mr Ohmae's new mission reveals much about the struggle between evolution and revolution now going on in Japanese government, which is being followed closely by Japan's trade partners eager to see Japan pull back the frontiers of the state and permit a more open economy.

Whoever is elected the city's top man – and it is an open field because of a large floating vote – would control an annual budget worth $80bn, for a city economy big enough to qualify for membership of the Group of Seven.

Mr Ohmae would like Tokyo to take more control of its own affairs from central government and become a significant player in the "borderless world" of interlinked economies described in one of his more than 50 books.

Mr Ohmae is the most prominent of the three political outsiders, including a former Wall Street investment banker and the inventor of the floppy disk, standing against the two front runners for the Tokyo job.

The two are Mr Yukio Aoshima, a television personality and former MP standing as an independent, and Mr Nobuo Ishihara, until recently deputy chief cabinet secretary, which made him the Shogun of the central bureaucracy, the exemplar of all that Mr Ohmae's reformers oppose.

Mr Ishihara, who has cross-party backing, is the establishment candidate, with the advantage of a rich and professional electoral machine.

Mr Ohmae has found the clubbish world of Japanese politics to be anything but borderless.

Outsiders are not welcome. "I hadn't really prepared myself for how ugly the political pressure would be. It's Machiavellian and dirty," he admits.

He has had to face pulp magazine campaigns alleging, absurdly, that he is a CIA agent, a reflection of the suspicion that Mr Ohmae has sold out to the *gaijin* (foreigners).

While painful, all that is the stuff of daily politics in Japan. An even tougher challenge for Mr Ohmae, and for anyone trying to break new ground in Japan's conservative politics, is how to differentiate himself from those who merely pay lip service to reform.

Mr Ohmae talks about shifting decision-making from the Mr Ishiharas in the all-powerful central bureaucracy down to local governments, paying more attention to consumers and citizens than producers and vested interests.

Japan's inward-looking establishment, based on cosy ties between politicians, bureaucrats and business, serves it and its international partners badly, Mr Ohmae argues. Now it is time for Japan to become a more active member of the global economy and for its people to determine their own fate, he says.

Central government has become paralysed by arcane procedures and battles between ministries, he contends, citing how the Kobe earthquake was a tragic example of how the "bureaucracy is immobile, incapable of acting with sympathy for people".

More mundane examples of this are central government's refusal to give consent for a refuse incinerator, to be moored on a barge in Tokyo bay, on the curious rationale that it did not qualify as an ocean-going vessel; and the need to obtain 12 different ministries' approval to open bicycle parks for commuters. Local governors could handle such matters more sensibly, he believes.

Mr Ohmae blames government regulation for Tokyo's poor housing and inadequate infrastructure. If elected, Mr Ohmae would declare that Tokyo recognised all reputable foreign building codes and invite a huge building programme of cheap, high-quality North American housing.

Yet all these are well tried themes. Mr Morihiro Hosokawa, once the most popular Japanese prime minister since the second world war, was the first to capitalise on them in 1993 – inspired by himself, Mr Ohmae says. Almost every ambitious politician in Japan has since tried to do the same.

Of course, vision alone is not enough, as Mr Ohmae argues in one of his management textbooks. Practical change, achieved through daily slog, is needed to implement change, and this is where he may be able to differentiate himself from the competition.

To this end, Mr Ohmae is seeking to establish a league of local authorities, which has so far attracted six of Japan's 47 provincial governors, to discuss his agenda for change.

He has launched another group, of 88 members of parliament, to prepare private bills, a rarity in the Japanese Diet, proposing the decentralisation of government.

But it has been a struggle for Mr Ohmae to make his own profile as popular as his platform. His political study group, called Reform of Heisei, after the current imperial era, has attracted only 35,000 members, a long way short of the target of 1m members by 1997 which he set on launching it two and a half years ago.

Mr Ohmae blames the public's apparent indifference on the educational system. "The ministry of education has done a wonderful job of persuading 120m Japanese that their fate is handed down to them by the government," Mr Ohmae said.

"I am having an uphill battle persuading people this is not so."

Taipei and Beijing offer olive branch in Spratlys row

By Laura Tyson in Taipei and Reuter in Bratislava

The disputed Spratly Islands' role as a lightning rod for regional rivalries intensified this week, with countries reiterating claims and Hanoi angrily accusing Taiwan's military of shooting at a Vietnamese cargo vessel cruising in the area.

But at the same time both Taiwan and China, two of the six Spratly claimants, urged a co-operative solution to the future of the potentially oil-rich archipelago in the South China Sea.

"Vietnam holds it is an extremely serious action violating territorial sovereignty of Vietnam over the Spratly archipelago, causing tension and threatening peace and stability of the region," Vietnam's foreign ministry declared, in response to an incident said to have occurred on March 25. Then, an unknown number of shells were fired from the Taiwan-held Taiping Island in the direction of the vessel, the Bien Dong 80.

Taipei restated its own territorial claim to the Spratlys amid widening controversy over a bungled police patrol mission to the islands. "Historically and legally, we have a sovereign claim in the Spratly Islands," said President Lee Teng-hui, in a rare press conference yesterday on his return from a trip to the Middle East.

The islands are claimed wholly or in part by China, Vietnam, Taiwan, the Philippines, Malaysia and Brunei. In tandem with the US's shrinking military presence in Asia, many countries in the region fear a resurgent China may seek to exert its influence beyond its borders.

Mr Qian Qichen, Chinese foreign minister, sought to allay such fears by saying yesterday that Beijing wanted to quell controversy over the Spratlys and urged common use of the archipelago. "China's standpoint is that we want to abandon the controversy and manage the islands together," he told a news conference in Bratislava.

In February, the Philippines accused China of building a possible naval support installation on a reef claimed by Manila. "China has built on these islands civilian structures with no military character at all. They were built only to accommodate the work of our fishermen," Mr Qian maintained.

Mr Roberto Romulo, Philippine foreign secretary, said on Monday the issue was likely to be discussed in talks between China and countries in the Association of South-East Asian Nations this week in the Chinese city of Hangzhou. Beijing has rebuffed calls for a regional conference over the dispute, saying issues should be hammered out in bilateral talks. China and Vietnam have already agreed on such talks.

In Taipei, Mr Lee said he would prefer the resources of the South Sea region were developed on a "co-operative basis". Taiwanese forces occupy Taiping Island, the largest in the group, which is also known as Itu Aba.

Taiwan opposition legislators yesterday sought the resignation of Mr Huang Kun-huei, interior minister, over his role in a planned patrol of the Spratlys by armed maritime police boats over the weekend. Citing a desire to avoid confrontation, the police commander aborted the mission.

Bhutto will seek to mend fences on her US visit

Nuclear policy still divides, writes Farhan Bokhari

Ms Benazir Bhutto, Pakistan's prime minister, begins a week-long visit to the US today, seeking to improve her country's troubled relations with Washington. She is the first Pakistani leader to undertake an official visit there in more than five years during which relations between the one-time cold war allies have been strained.

In 1990 Washington froze its large economic and military aid package to Islamabad, accusing Pakistan of seeking to produce nuclear weapons.

Pakistan continues to resist US demands to open its nuclear facilities for international inspection unless India does the same. The official US position continues to be that both Pakistan and India could assemble a nuclear weapon quickly.

Ms Bhutto's government has tried during the past year to establish, in the words of Pakistani officials, "a new partnership" based on "changing realities" after the collapse of the Soviet Union. American businesses have been encouraged to benefit from Pakistan's economic reform programme and invest in the country, especially in the recently deregulated energy sector.

Islamabad is also keen to combat Islamic fundamentalism and narcotics, two issues of interest to the US administration. The extradition of two alleged drug barons from Pakistan to face charges in the US last Sunday, just before Ms Bhutto's departure, is intended to signal Islamabad's commitment to fighting drug abuse, western diplomats say. Last month, Pakistan extradited Mr Ramzi Yousef, who a US court alleges masterminded the bombing of the World Trade Center in New York in 1993.

The sanctions have curtailed the supply of economic aid and military hardware from the US, once Pakistan's most important arms supplier. Some sales of munitions and parts for systems the Pakistanis already have have been allowed, as has some humanitarian aid. But big-ticket items, such as part of an order of 71 F-16 fighter aircraft, have been held back.

There are no signs that the sanctions, imposed under the "Pressler amendment", are likely to be lifted. The Pressler amendment requires the administration to certify that Pakistan does not possess a nuclear weapon, which administrations since 1990 have declined to do.

But Ms Bhutto is keen to project her country's image as an important western ally in the south Asian/south-west Asian region. She said recently: "An old (American) friend, an ally, a frontline state against extremism, militancy, terrorism and the narcotics trade is being undermined. Should the US not review its policies to strengthen a moderate Pakistan?" She would also be meeting American businessmen, to seek more investments to Pakistan, she said. "We are very pleased with corporate America which has openly endorsed our policies."

At home, Ms Bhutto's government faces difficult economic and political challenges, including continuing violence in the business capital, Karachi, which claimed the lives of two US consulate workers recently.

On the political front Ms Bhutto's ruling Pakistan People's party and the opposition Pakistan Moslem League led by Mr Nawaz Sharif have shown few signs of agreeing on important issues such as constitutional reforms that would strengthen the country's fragile parliamentary democracy.

Ms Bhutto's critics maintain that her visit will be of limited benefit unless her government becomes stronger at home.

Mrs Abida Hussain, Pakistan's former ambassador to the US and now an opposition leader, said: "Any leader's ability to impress friendly governments anywhere depends increasingly on how a leader is viewed in one's own country." She added: "If a fair appraisal is made of Pakistan, it would not go unnoticed that the ability of the government to satisfy Pakistani people has not been on the high side."

NEWS: WORLD TRADE

China may need $1,000bn for energy

By Peter Montagnon, Asia Editor

Annual demand for energy in China will climb to 1.94bn tonnes of oil equivalent by 2015 from 750m in 1993 if present policies of decentralisation and progressive price liberalisation continue, according to a study by DRI/McGraw-Hill.*

The investment required to meet this demand could reach $1,000bn, of which slightly more than half would go on electric power generation. Foreign capital would account for *some 30 per cent of the total*, the report forecast.

But the profile of China's energy market depends heavily on the policies adopted by the government, it said, and substantial variations can be expected from province to province.

Overall demand would be some 6 per cent below the central forecast by 2015 if price reform is held back over the next five years to combat inflation.

Keeping state control over energy prices would deter investment and prolong shortages. Consumption would be particularly depressed in southeast coastal provinces with few indigenous resources.

DRI/McGraw-Hill said investors in Asian power projects must therefore take account of both regional and national policy in selecting projects.

Overall energy consumption will not be much affected if China recentralises economic policy to boost growth in inland provinces and balance economic growth through the country.

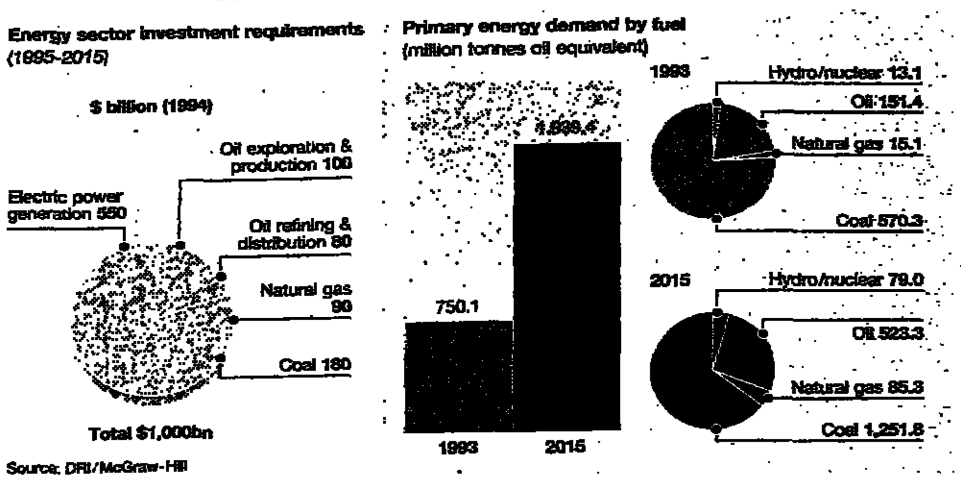
But significant variations in primary energy demand would result. In Guangdong it would fall 21 per cent below the central forecast by 2015, whereas in Sichuan it would be 10 per cent higher.

Such a development would also see a relatively heavier reliance on coal and natural gas. If by contrast price reforms are deferred, all fuels would be affected by lower demand. Natural gas and oil would see the largest decline because the development of natural gas depends on significant investment in transmission and distribution grids, while the satisfaction of oil demand depends on the tripling of refining capacity between 1994 and 2015.

Foreign investment in the energy sector is likely to be concentrated in oil and gas exploration and production, oil refining and power generation, rather than in coal production and transport, where as yet foreign companies have not been invited to take a major role.

**China's Energy in Transition, pp447, price $17,000, available from DRI International Energy Consulting, 8-10 rue Villédo, 75001 Paris, France. Fax 331 42 60 25 05.*

China's energy needs: the leap foward to 2015



Source: DRI/McGraw-Hill

Germany begins Indonesia catch-up

Michael Lindemann on interest in investment opportunities so far waived

For more than 20 years, Mr Fritz Kleinsteuber has been trying to get German companies to invest in Indonesia. This week could possibly be the sweetest since he first arrived in Jakarta.

As head of the German chamber of commerce in the Indonesian capital he has repeatedly tried to appraise German companies of the advantages of doing business in Indonesia.

Now as President Suharto of Indonesia makes his third and biggest visit to Germany, there are signs that Mr Kleinsteuber's work has not been in vain.

Indonesia is the guest country at the Hanover trade fair, the world's largest industrial fair, and a series of contracts have been signed heralding the start of a German catch-up on other investors in the south-east Asian archipelago with a population of 190m.

One problem, he says, is that for decades many German companies are happy simply to export to Indonesia the way they have done for the last 100 years since the first German traders arrived. "Eight out of the 10 deals done here involve trading – only two are actually investments," he said.

That has meant that Germans have lost out to other investors, mainly the Japanese and other Asian countries, who are prepared to invest in local production and help Indonesia build its industrial base.

These investors regard Indonesia as attractive because it has been growing at an annual rates of around 7 per cent over the last decade and because it makes up more than half the 350m people in Asean, the south-east Asian trading bloc, which is planning to reduce tariffs on locally made goods over the next 10 years.

In recent years Mr Kleinsteuber helped Wella, the German cosmetics group, move production to Indonesia but saw Volkswagen, Europe's largest car maker, withdraw in the early 1980s, partly to relocate to China. Other German carmakers have also kept out, leaving the Japanese who have gone so far as to build some models specifically for local consumption, to win most of the market.

The result is that since 1967 German companies have invested DM267m ($191m) in Indonesia, considerably less than the DM550m that has been invested in South Korea or the DM309 invested in Thailand, both smaller countries. Germany is twelfth on a league table of foreign investors in Indonesia and trade between the two countries amounted to DM6.3bn in 1994.

Some German companies say they have been wary about investing because large parts of the Indonesian economy are still owned by President Suharto and his family.

Since investments depend heavily on patronage from the presidential clan, there is a considerable risk that investments might be sidelined if the 74-year-old president was toppled or succeeded by a different political faction, they say.

Worst of all, say German businessmen in Jakarta, is the fact that Germany has not taken advantage of a country where thousands of managers received German educations.

After independence from the Netherlands in 1945, hundreds of Indonesian students crossed the border to Germany. One result is that four members of President Suharto's cabinet were educated in Germany, including Mr B J Habibie, the minister for research and technology, who is trying to secure more German investment in Indonesia.

Indonesian-German deals due to be signed during President Suharto's visit are:

- A consortium headed by Siemens, the power and engineering group, will sign a $1.6bn contract to build Indonesia's second large private power project, called Paiton II, comprising two coal-fired power stations in East Java.
- Asea Brown Boveri will sign letters of intent for the construction of two power plants.
- Audi, the performance car division of Volkswagen, will sign a contract with PT Garuda Mataram Motor to assemble the A4 model from completely knocked down kits.
- Indonesia has agreed in principle to make the German state of Lower Saxony the centre for the assembly and marketing of its aircraft, notably the N-250 passenger aeroplane being built by IPTN, the state-owned manufacturer.
- Bayer and PT Polkrik Chemicals will set up a joint venture to make textile dyes in Cikande, Indonesia. A total of DM90m ($65m) will be invested in the plant.

EU draws up plans on banana regime

By Caroline Southey in Brussels

The European Commission yesterday agreed changes to the EU's controversial banana regime for African, Caribbean and Pacific countries in an effort both to simplify the system and to take account of EU enlargement.

The regime, which includes securing preferential access to the EU market for ACP producers over cheaper "dollar" bananas from Latin America, has been criticised by the World Bank, the US and Latin American producers.

The changes, still to be agreed by EU member states, are unlikely to satisfy some EU member states. Germany wants the entire banana system scrapped while others, such as the Netherlands, Denmark and Belgium, want a radical overhaul.

"This is a simplification of the system which everybody should support but the banana regime has always been a divisive issue for the Community," an EU official said.

A commission official warned that without change, present quotas would be insufficient because of the accession of Austria, Finland and Sweden, which could lead to a shortage of bananas by the end of the year.

The changes, prepared by Mr Franz Fischler, EU commissioner for agriculture, include an increase of 353,000 tonnes in the quota to 2.6m tonnes for the 15-strong EU.

He has also proposed simplifying the management of the import system for traders. The three-year rolling average used to work out the allocation for traders would be changed to two years.

Mr Fischler also proposed stripping away different weightings used to allocate licences to operators. New licences would be worked out on the basis of historical trading activity.

The regime, introduced in July 1993, was set up to replace national restrictions on imports.

WORLD TRADE NEWS DIGEST

Foreign projects in Vietnam rise

Vietnam has approved foreign and domestic investment projects worth $2.1bn in the first quarter of this year, more than half the amount approved in the whole of 1994. The foreign investment licensing body, the State Committee for Co-operation and Investment (SCCI) said it had licensed 87 foreign investment projects worth $1.8bn in the first quarter. Tourism and hotel projects accounted for 57.6 per cent of the new projects and industrial ventures 22 per cent. Foreign investors say approvals have been moving faster for some months, mostly as a result of a moderately successful reduction in red tape. Only about a quarter of the total $11bn in foreign investment so far pledged has been translated into active projects, mostly because of licensing backlogs. Vietnam hopes to attract between $5.5bn and $6bn in total approved investment this year, SCCI officials said. *Our Hanoi Correspondent*

Samsung, Nintendo end dispute

Samsung Electronics of South Korea has reached an out-of-court settlement with Nintendo of Japan over a US patent dispute involving Nintendo's video game software. The two companies will re-open business deals, Samsung said. Nintendo filed a damages suit in January with a federal district court in Seattle against Samsung, claiming that the South Korean company had copied and sold its integrated circuit programs for game software to a maker while being aware that they would be misused by the manufacturer. Nintendo's suit prompted a counter-lawsuit from Samsung in February. According to Samsung, Nintendo recently acknowledged that Samsung had not pirated the Nintendo products and that the products had been supplied by a third party. The two companies expressed satisfaction that the patent dispute was over, Samsung said. *Kyodo, Seoul*

Contracts and Ventures

■ US telecommunications giant Motorola said it would boost its investments in China to $1.2bn by 2000 from $280m at the end of 1994. Motorola (China) Electronics said the expansion would include a $360m investment in its Tianjin factory, where it makes pagers and mobile telephones. An advanced semiconductor factory is also planned. Motorola will also lift the domestic content of its components to 50 per cent by 2000 from the current level of 30 per cent. *Reuter, Beijing*

■ South Korea's state-funded Korea Land Development Corp (KLDC) has agreed to develop a 427,000 sq m lot in Shenyang, in China's northeastern Liaoning province, into an industrial complex exclusively for South Korean companies. South Korea will pay $4.76m for a 50-year lease of the land within the Shenyang Economic and Technical Development Zone, a KLDC spokesman said. Preparatory work will be completed by the end of 1996 and all related construction work will be undertaken by South Korean contractors. *Reuter, Seoul*

■ A Spanish consortium of four railway construction and engineering companies has signed an agreement with the Philippine government to build a $600m railway from Manila to Clark Air Base, a former American airforce enclave. The memorandum of understanding requires Euroatom – the Spanish group, led by Construcciones y Auxiliar de Ferrocarriles – to lay the 87km railway line by 1998 in time for the start of the construction of a proposed new international airport at Clark. But the agreement partly depends on whether the government decides to upgrade Manila's Ninoy Aquino International Airport, to divert air traffic to the planned site at Clark Air Base, or both. *Edward Luce, Manila*

TENDER NOTICE

UK GOVERNMENT ECU TREASURY BILLS

For tender on 11 April 1995

1. The Bank of England announces the issue by Her Majesty's Treasury of ECU 1,000 million nominal of UK Government ECU Treasury Bills, for tender on a bid-yield basis on Tuesday, 11 April 1995. An additional ECU 50 million nominal of Bills will be allotted directly to the Bank of England for the account of the Exchange Equalisation Account.

2. The ECU 1,000 million of Bills to be issued by tender will be dated 13 April 1995 and will be in the following maturities:
ECU 200 million for maturity on 11 May 1995
ECU 500 million for maturity on 13 July 1995
ECU 300 million for maturity on 12 October 1995

3. All tenders must be made on the printed application forms available on request from the Bank of England. Completed application forms must be lodged, by hand, at the Bank of England, Customer Settlement Services (formerly Securities Office), Threadneedle Street, London, not later than 10.30 a.m., London time, on Tuesday, 11 April 1995. Payment for Bills allotted will be due on Thursday, 13 April 1995.

4. Each tender at each yield for each maturity must be made on a separate application form for a minimum of ECU 500,000 nominal. Tenders above this minimum must be in multiples of ECU 100,000 nominal.

5. Tenders must be made on a yield basis (calculated on the basis of the actual number of days to maturity and a year of 360 days) rounded to two decimal places. Each application form must state the maturity date of the Bills for which application is made, the yield bid and the amount tendered for.

6. Notification will be despatched on the day of the tender to applicants whose tenders have been accepted in whole or in part. For applicants who have requested credit of Bills in global form to their account with ESO, Euroclear or CEDEL, Bills will be credited in the relevant systems against payment. For applicants who have requested definitive Bills, Bills will be available for collection at the Customer Settlement Services, Bank of England after 1.30 p.m. on Thursday, 13 April 1995 provided cleared funds have been credited to the Bank of England's ECU Treasury Bills Account No. 59005516 with Lloyds Bank Plc, International Banking Division, PO Box 19, Hays Lane House, 1 Hays Lane, London SE1 2HA. Definitive Bills will be available in amounts of ECU 10,000, ECU 50,000, ECU 100,000, ECU 500,000, ECU 1,000,000, ECU 5,000,000 and ECU 10,000,000 nominal.

7. Her Majesty's Treasury reserve the right to reject any or part of any tender.

8. The arrangements for the tender are set out in more detail in the Information Memorandum on the UK Government ECU Treasury Bill programme issued by the Bank of England on behalf of Her Majesty's Treasury on 28 March 1989, and in supplements to the Information Memorandum. All tenders will be subject to the provisions of the Information Memorandum (as supplemented).

9. The ECU 50 million of Bills to be allotted directly to the Bank of England for the account of the Exchange Equalisation Account will be for maturity on 12 October 1995. These Bills may be made available through sale and repurchase transactions to the market makers listed in the Information Memorandum (as supplemented) in order to facilitate settlement.

10. Copies of the Information Memorandum (and supplements to it) may be obtained at the Bank of England. UK Government ECU Treasury Bills are issued under the Treasury Bills Act 1877, the National Loans Act 1968 and the Treasury Bills Regulations 1968 as amended.

Bank of England
4 April 1995

CONTRACTS & TENDERS

COMPANHIA PARANAENSE DE ENERGIA COPEL

USINA HIDRELÉTRICA DE SALTO CAXIAS
INTERNATIONAL CALL FOR TENDERS C-201
TURBINES AND REGULATORS
DEADLINE POSTPONEMENT

The Companhia Paranaense de Energia – Copel, announces that presentation of proposals and qualification documents for the International Call for Tenders C-201 was postponed to April 20th, 1995 at 2:00 pm.
Address: Edificio Sede da Copel's auditorium at Rua Cel. Dulcidio, 800 – 10th floor
All other conditions remain unaltered.

GOVERNO DO ESTADO DO PARANÁ

LEGAL NOTICES

No. 001152 of 1995
IN THE HIGH COURT OF JUSTICE
CHANCERY DIVISION
IN THE MATTER OF
FLEXELLO LIMITED
AND
IN THE MATTER OF
THE COMPANIES ACT 1985

NOTICE IS HEREBY GIVEN that a Court Order dated 29th March 1995 confirming the reduction of the capital of the above name Company from £3,250,000 to £1,750,000 was registered by the Registrar of Companies, and the said reduction of the capital of the above named company takes effect as from 31st March 1995.

A copy of the said Order will be furnished to any such person requiring the same by the undermentioned solicitors on payment of the regulated charge for the same.

DATED this 31st day of March 1995

Wilde Sapte
1 Fleet Place
LONDON EC4M 7WS
(Ref: ALW/442836/1,55677)

Solicitors for the above named Company

CHARLES IVEY LIMITED
(IN ADMINISTRATIVE RECEIVERSHIP)

NOTICE IS HEREBY GIVEN pursuant to section 48(2) of the Insolvency Act 1986, that a meeting of the unsecured creditors of the above-named company will be held at the offices of Robson Rhodes, 186 City Road, London EC1V 2NU on Wednesday, 19 April 1995 at 10.00 in the morning, for the purpose of having laid before it a copy of the report prepared by the Joint Administrative Receivers under Section 48 of the said Act. The meeting may, if it thinks fit, establish a creditors committee to exercise the functions conferred on it, by or under the act.

Creditors are only entitled to vote if:

(a) they have delivered to the Joint Administrative Receivers at Robson Rhodes, 186 City Road, London EC1V 2NU, no later than 12.00 hours on the business day before the meeting, written details of the debts they claim to be due, and the claim has been duly admitted under the provisions of the Insolvency Rules 1986 and

(b) there has been lodged with us any proxy which the creditors intends to use on his behalf.

Dated this 3 April 1995

V M BAIRSTOW and N RUDDOCK
Joint Administrative Receivers

Creditors may obtain a copy of the report, free of charge, on application to the Joint Administrative Receivers at 186 City Road, London EC1V 2NU

No: 001143 of 1995
IN THE HIGH COURT OF JUSTICE
CHANCERY DIVISION
COMPANIES COURT
MR REGISTRAR BUCKLEY
IN THE MATTER OF
Ennemix Holdings Limited
-and-
IN THE MATTER OF
THE COMPANIES ACT 1985

NOTICE IS HEREBY GIVEN that the Order of the High Court of Justice (Chancery Division) dated 29 March 1995 confirming the reduction of the capital of the above-named Company from £3,000,000 to £2,138,486 and confirming the reduction of the Share Premium Account of the above named Company by £2,861,457 and the Minute approved by the Court showing with respect to the capital of the Company the several particulars required by the above-mentioned Act were, registered by the Registrar of Companies on 30 March 1995.

No: 001136 of 1995
IN THE HIGH COURT OF JUSTICE
CHANCERY DIVISION
COMPANIES COURT
MR REGISTRAR BUCKLEY
IN THE MATTER OF
Ennemix Construction
Materials Limited
-and-
IN THE MATTER OF
THE COMPANIES ACT 1985

NOTICE IS HEREBY GIVEN that the Order of the High Court of Justice (Chancery Division) dated 29 March 1995 confirming the reduction of the capital of the above-named Company from £2,000,000 to £2 and the Minute approved by the Court showing with respect to the capital of the Company the several particulars required by the above-mentioned Act were registered by the Registrar of Companies on 30 March 1995.

هكذا من الاصل

It must be a funny old world for the big four telecom companies.

They handle global communications. They sell their services and technology around the world.

They're prepared to offer intimate "local knowledge" of far flung places.

Yet they're all rooted firmly in just one country.

At Cable & Wireless on the other hand, we like to think of ourselves as a Federation.

A tightly knit group of over fifty partner companies free to operate largely autonomously, yet able to call on the skills and experience of all the other members.

The Federation has over 40,000 people working in more countries than any other telecommunications group.

They're free to pick and choose their information and equipment from the best possible sources.

They're not saddled with systems and products dictated by Head Office and (yes, you guessed it) made by Head Office.

If, for example, our partners in St. Petersburg felt that the system used by Yemen International Telecom was right for them, then that's where they could get it from. (They did.)

And if they decided to route the calls through the Mercury switches in the UK then they can. (They do.)

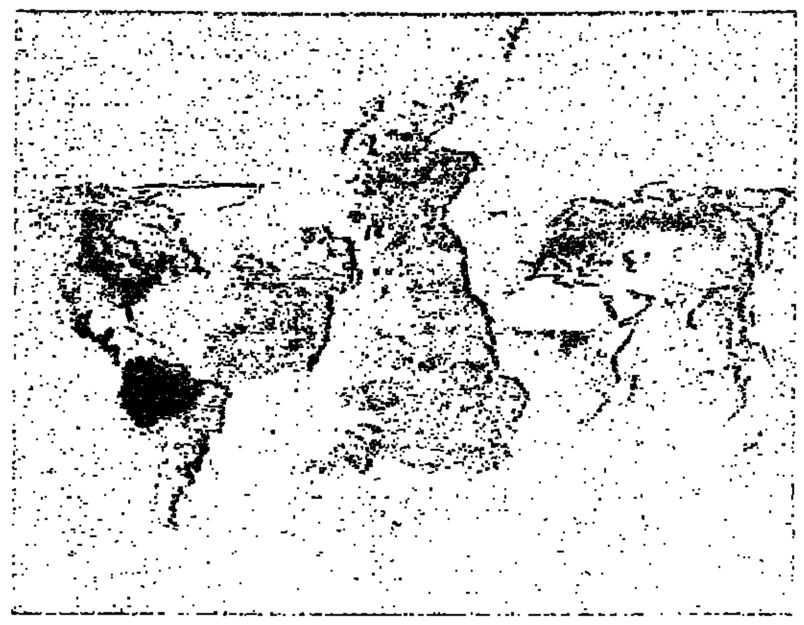
We're convinced that one day all companies will be run as Federations.

If you would like to hear more about our way of working and how it could help you, fax us on +44 171 315 5052.

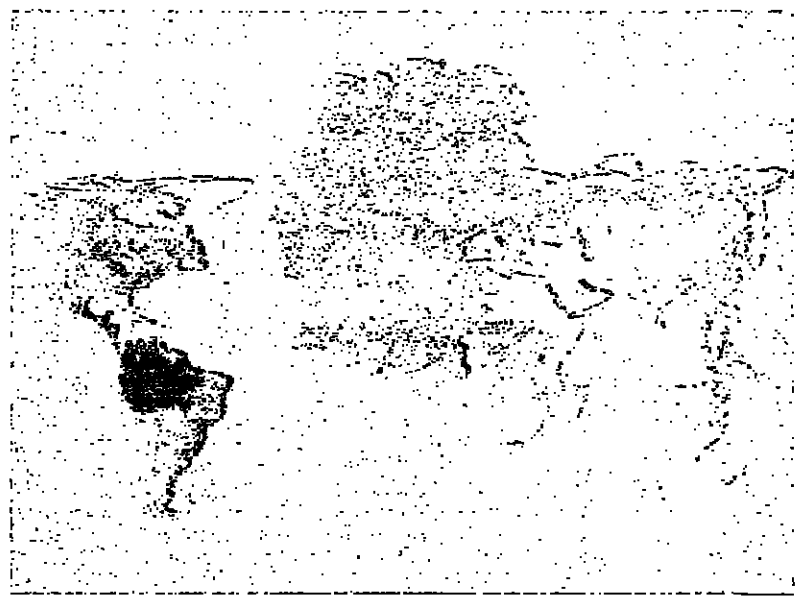
And then, by all means take a long look at the other big telecommunications companies.

You'll discover a world of difference with Cable & Wireless.

THE World according to BRITISH Telecom.



THE World according to *Deutsche* Telekom.



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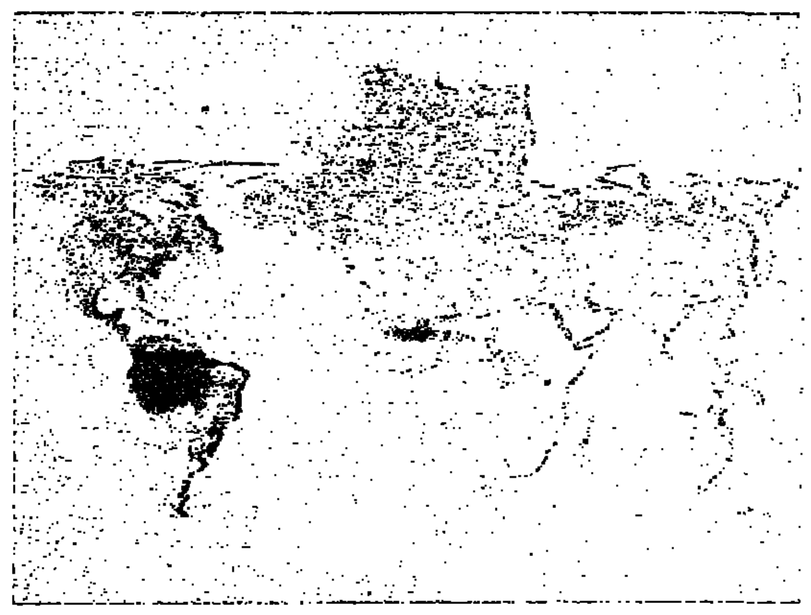

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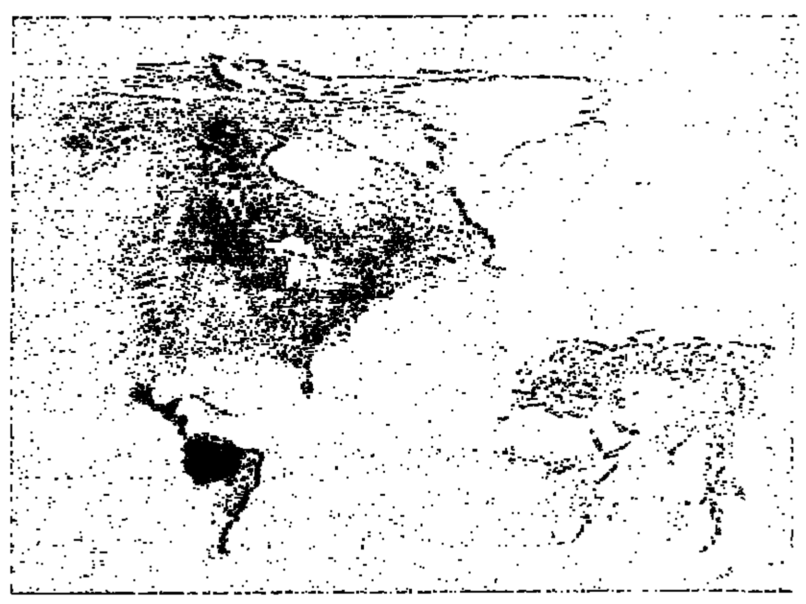
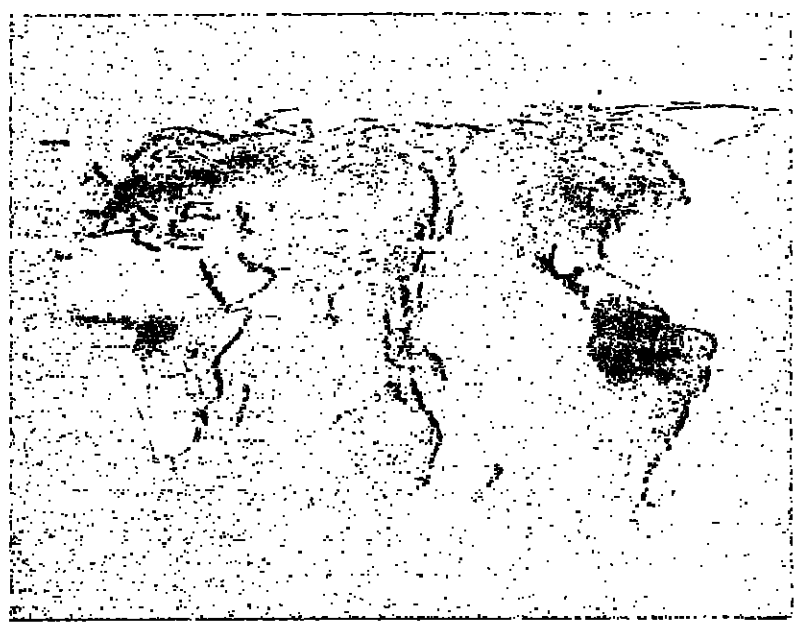


THE World according to *Cable* & Wireless.



THE CABLE & WIRELESS FEDERATION

An alliance of the world's most creative communications companies.

Argentine loan would provide link to agreements by IMF and World Bank

Talks on $1bn 'bridge to finance'

By Stephen Fidler, Latin America Editor, in Jerusalem

Central banks from industrialised countries, including the US, are discussing a bridging loan to Argentina of more than $1bn, international financial officials said yesterday in Jerusalem, where the annual meeting of the Inter-American Development Bank takes place today.

They said the loan was being discussed by central banks under the auspices of the Basle-based Bank for International Settlements (BIS) and the US Federal Reserve.

Unlike the recent $10bn central bank financing announced as part of the $50bn rescue package for Mexico, the proposed Argentine loan would provide a bridge to finance recently agreed by the International Monetary Fund and World Bank. This more traditional use for BIS finance is likely to be less controversial than the Mexican loan.

Mr Domingo Cavallo, Argentina's economy minister, said foreign governments were discussing a $1.2bn credit for Argentina. Some $5.4bn of loans have been agreed – the IMF with a $2.4bn standby loan, the World Bank with $1.3bn, and the IADB.

Argentina is also raising $2bn through an issue of bonds, $1bn to domestic subscribers and $1bn to foreign banks. The domestic portion of the bond was oversubscribed and Mr Cavallo had hoped to announce the completion of the foreign portion at the Jerusalem meeting.

However, bankers said yesterday that while most US banks and some European banks had made commitments to the bond issue, agreement had yet to be obtained from some European banks. Nevertheless there was some optimism among financiers that the bond issue would eventually be successful.

The slow pace of raising finance from Argentina and the failure of a previous attempt to raise a $3bn loan from international banks as part of a Mexican rescue package show the changed priorities of banks since the 1980s and that most have a relatively small part of their portfolio tied up in the countries.

The structuring of the finance as a bond, however, means that most international banks must mark its price to market levels. Given the interest rate on the bonds – three percentage points over London interbank rates – is below the level implied by the market in existing Argentine bonds, this suggests that some banks would have to take the bonds on to their books at a discount.

Mexico is now past the worst, says Ortiz

By Stephen Fidler

Mexico's finance minister, Mr Guillermo Ortiz, said yesterday he believed Mexico had turned the corner following the financial crisis provoked by the peso devaluation in December and announced plans to begin talks with commercial banks on raising between $1bn and $1.5bn from international banks.

He said some of the pressure was off the economy because of the reduced rate of debt repayments coming due in the second quarter. During the first quarter, he said Mexico had paid down some $15.6bn in foreign debt – of which $11bn had come from the country's international support package and the remaining $4.6bn had been generated by the economy. During the second quarter, only $9bn in debt repayments were to come due.

Mr Ortiz said there was sufficient international financial support to meet second quarter maturities, a view reflected by other finance officials at the annual meeting of the Inter-American Development Bank.

One international finance official said talk of a technical shortfall of international finance in the first half of the year was ill-founded. "There is no way this thing would be allowed to fail because of some problem with the hydraulics".

Mr Ortiz said that the Mexican economy had reacted rapidly to the economic austerity package that had been put in place. The country would probably be developing a current account surplus by the second half of the year.

This might possibly allow some build-up in foreign exchange reserves and allow the government to set, if necessary, another exchange rate regime. The peso is currently floating freely.

Mr Ortiz said Mexico had repaid $14bn of *tesobonos* – short-term dollar denominated government debt during the first quarter – though not all of these were in the hands of foreigners. The government had also repaid $2bn in other short-term public debt, while commercial banks had repaid $3bn in maturing certificates of deposit and other private sector debtors had repaid $1.5bn.

However, in the second quarter, $6bn of *tesobonos* is to come due and a further $3bn of other short-term debt. Furthermore, between April and November very little private commercial debt matures, with the exception of some bonds from the airline Aeromexico, which come due in July.

In the second quarter, a further $5bn was available from the US and funds would be available from its own reserves, and loans from the IADB and World Bank.

Mr Ortiz said the aim was to use the bank finance for the government's plan to support the banking system, but said it was too early to specify what kind of terms would be obtainable. Bankers have expressed scepticism about the ability to raise finance.

However, Mr Ortiz said that $2.95bn had been committed to the short-term financing but that in any case, Mexico needed medium-term rather than short-term finance. Monetary officials confirmed yesterday that a curious quirk meant that the risk weighting for Mexico, which reflects the amount of capital that must be set aside by banks lending to the country, fell at the start of this month.

The move, that will also reduce the capital that debt traders must hold against holdings of certain Mexican securities, reflected Mexico's entry last year of the Organisation for Economic Co-operation and Development. Higher capital requirements were levied on Mexico until after the fifth anniversary of its last debt rescheduling, completed in March 1990.

Ortiz: some pressure has come off the economy

IADB arm will not limit its members

By Stephen Fidler

Government shareholders of the International Investment Corporation, the private sector investment arm of the Inter-American Development Bank, have agreed to expand the membership of the institution to non-members of the bank – including Taiwan.

They decided against restricting new shareholders to members of the International Monetary Fund, enabling Taiwan, not an IMF member, to join.

Taiwan has close ties with some central American and other states in the region but the possibility that China might want to join the IADB had seemed likely to thwart its membership of the IIC.

As well as deciding not to impose conditions on would-be shareholders, the annual board of governors meeting agreed to treble the allowed debt-to-equity ratio of the IIC, which has $200m of capital, to 3:1 and to ease requirements which restricted IIC projects to those majority-owned by Latin American entities. No decision was taken on whether to allow the IIC to form subsidiaries in member countries.

This should allow the corporation to continue to operate until 1998, when a capital increase may be considered.

Foes in Congress rehearse for tax battle

By George Graham in Washington

Democrats in the US went on the attack yesterday as the Republicans pushed for passage of the last item in their Contract with America manifesto: a bill cutting capital gains taxes and offering a $500 per child tax credit to those with taxable income under $200,000 a year.

Vice-president Al Gore said: "I don't think there is any mystery to it. I think they're playing to their [Republican] power base which traditionally, and now again, is the very wealthy and very powerful."

Earlier this week Congress had a foretaste of the battle over a bill which started as an uncontroversial measure to keep health insurance premiums as tax deductions for self-employed people. It turned into a dress rehearsal for conflict between the Republicans and the Democrats over race, income and fairness.

The bill, passed on Monday night and sent to President Bill Clinton for signature, would make permanent a provision allowing the self-employed to deduct 25 per cent of their health insurance premiums from their taxable income. The measure has expired, and its renewal before next week's tax filing deadline is strongly backed by small business groups.

But congressional budget rules require a tax break of this sort to be paid for. The two measures tacked on to produce the necessary revenue revealed sharp rifts.

The first repealed a tax break for companies which sell television or radio stations to minority-owned businesses. Driven by outrage that the Viacom media giant would save up to $600m in tax due on the sale of its cable interests to a minority partnership, the measure seemed at first to arouse little controversy.

But Republican leaders have attacked affirmative action programmes designed to help minorities, so debate on the Viacom tax break turned into a preliminary skirmish in this wider argument.

The Republicans won. The tax break will vanish – although with one final exemption for the sale of an Atlanta television station by Mr Rupert Murdoch's Fox chain to a company headed by Mr Quincy Jones, the record producer.

The second measure would have hit multi-millionaires who escape US taxation by changing their nationality. It would have taxed the notional gain on all their property, with a $600,000 exemption, as though it were sold when they gave up US citizenship.

Although the Treasury estimates it would affect fewer than 25 people a year, each would stand to lose heavily: the projected revenue gain is $1.4bn over five years. But House Republicans, who objected that it would violate international law and set a bad example to oppressive regimes that might impose exit taxes on their citizens, won its elimination. But, in so doing, they exposed themselves to scathing Democrat commentary.

"We have a whole lot of billionaire bums rejecting their citizenship to avoid paying taxes," complained Congressman Charles Rangel of New York.

$4bn net outflow for Brazil

Brazil's mismanaged devaluation last month contributed to a record net outflow of $4.04bn (£2.48bn) in March, according to central bank figures, **writes Patrick McCurry in São Paulo.**

The outflow was concentrated in the capital account, which includes withdrawals by foreign portfolio investors and remittances by multinationals. It is thought to have reduced Brazil's international reserves to about $30bn. Last October reserves stood at $40.4bn.

Much of the outflow was sparked by foreign investors' nervousness in the days following the devaluation on March 6 when the government announced new formal exchange rate bands, effectively devaluing the Real currency by about 5 per cent.

Government statements that the bands could be moved at any time caused market uncertainty forcing the central bank to sell dollars to support the Real.

Argentine bank scheme hits snag

By David Pilling in Buenos Aires

Legislation to establish a bank deposit guarantee scheme in Argentina is due to be sent to Congress today amid doubts over whether some banks have the cash to contribute.

The central bank wants the system, which will be entirely private, to be funded with 2 per cent of bank deposits. But many banks, facing extremely tight liquidity, are unlikely to have the disposable cash.

Argentina, whose central bank has no authority to emit pesos unless backed by inflows of hard currency, does not have a deposit guarantee scheme, nor a lender of last resort. The government believes it is essential to establish security for savers to breathe confidence into a financial system that has suffered withdrawals of $7bn since the start of the Mexican crisis.

Details of the scheme were being hammered out yesterday in a meeting between the central bank and bank officials. Some banks have resisted contributing, arguing their 2 per cent should be taken from contributions made earlier this year to a $750m banking safety net. That money, however, has already been spent on buying up portfolios of struggling institutions.

Government moves to reassure depositors come in the context of several bank suspensions. Other banks have been unable to meet the repayment requests of depositors, many of whom have been transferring their accounts from smaller banks to first-tier institutions. This week, Banco Unión Comercial e Industrial, a regional bank, limited withdrawals to $200 a day.

Mr Martin Redrado, director of the Fundación Capital economic consultancy, said between 60 and 70 of Argentina's 150 banks had solvency problems. Most of these were wholesale banks or regional co-operative institutions, he said.

Fiscal discipline breaks out across Canada's provinces

Bernard Simon points to market pressures and public opinion

Some unusual patterns have recently emerged in Canada's financial markets. Long-term bonds issued by Ontario, the richest and most diversified of the 10 provinces, offer virtually the same yield these days as Saskatchewan, with a fraction of the population and an economy heavily dependent on volatile uranium and wheat markets.

Similarly, impoverished Newfoundland, where the collapse of the Atlantic fishery has pushed unemployment above 20 per cent, commands a lower return on its bonds than Quebec, whose economy is being powered by booming automotive and forest products industries.

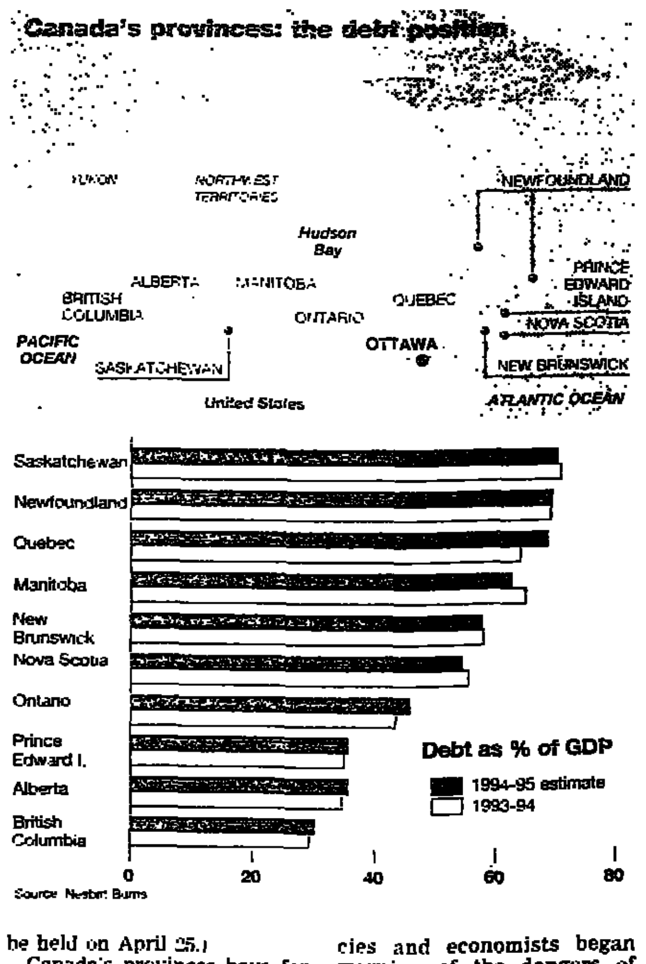
These apparent anomalies are a sign that financial markets have taken notice of those provinces which are coming to grips with their troublesome debt and deficit problems.

British Columbia last week became the sixth province to table a balanced budget for the year to March 31 1996. The others are Saskatchewan, Manitoba, Newfoundland, Prince Edward Island and New Brunswick. Newfoundland will eliminate its deficit for the first time since it joined the Canadian federation in 1945.

Alberta, which pioneered the climate of fiscal restraint, has projected a modest C$506m (£220m) deficit for the coming year and has promised to eliminate the shortfall entirely in 1996-97.

Some provinces are also taking steps to ensure that balanced budgets are not a flash in the pan. Alberta has passed a law which requires the government to balance the books from now on and to eliminate the provincial debt, currently C$8.2bn, within 25 years. Documents accompanying the budget last month stated categorically that "this will be the last deficit budget in Alberta".

Manitoba has gone further, with a proposal that cabinet ministers forfeit 20 per cent of their pay in the event of a deficit budget, and 40 per cent if the shortfall is repeated the following year. Any significant tax increases will require approval in a referendum. (The future of these measures depends however, on the outcome of a provincial election to be held on April 25.)



Canada's provinces have far wider powers than regional governments in most other countries. They administer health, education and many social and business services. Fiscal discipline is a new way of life for them.

Led by Ontario and Quebec, their combined debt ballooned from C$240bn in 1991 to C$360bn in the current fiscal year, with their debt climbing from 36 to 48 per cent of gross domestic product. A growing proportion of funds has been raised in foreign currencies as the Canadian dollar has weakened.

The new-found austerity stems from a combination of market pressures and public opinion. As deficits rose in the late 1980s, credit-rating agencies and economists began warning of the dangers of heavy debt burdens. The turning point came in 1993 when Saskatchewan (which together with Newfoundland has the lowest credit rating among the provinces) came close to being shut out of US capital markets.

At the same time, public opinion – especially in western Canada – moved strongly in favour of restraint. The Reform party swept the west in the October 1993 general election with a platform grounded on fiscal discipline. Decisive action to bring down deficits continues to help rather than hurt provincial politicians.

The emphasis has fallen on spending cuts rather than tax increases, although user fees for government services have gone up steeply. Alberta estimates that spending on programmes other than health, education and social services will shrink by 27 per cent between 1993 and 1998.

"It's a combination of doing a good job and enjoying some good luck," says Mr Ted Carmichael, senior economist at JP Morgan Securities Canada.

Alberta and Saskatchewan, for example, have benefited from unexpectedly strong oil royalties. British Columbia's economy grew by almost 5 per cent in real terms last year. A jump in lottery and casino revenues has helped Manitoba.

The two odd ones out are Ontario and Quebec, which between them account for almost 70 per cent of provincial debt. Ontario, where the left-of-centre New Democratic party holds office, is expected to post a deficit of about C$10bn in the fiscal year ending March 31, little changed from previous years.

Its debt-to-GDP ratio, including government-guaranteed debt, has jumped from 26 per cent to 45 per cent since 1990.

Strong economic growth is expected to bring the deficit down markedly in 1995-96. But, with a provincial election due later this year, fiscal restraint is unlikely to be at the top of the government's agenda. Nevertheless, Ontario's NDP is among the most unpopular parties in the country and is widely expected to be whipped at the polls.

Quebec's secessionist government has given higher priority to gaining public support for independence than tightening its belt. The deficit has grown from C$4.9bn in 1993-94 to an estimated C$5.7bn in the current fiscal year.

Those provinces which have bitten the bullet are likely to be rewarded with improved credit ratings. The premiums on their bonds have narrowed sharply in recent months. "There are too many investors chasing too few bonds," says Mr Daniel Kelly, vice-president for fixed-income research at CIBC/Wood Gundy.

Voters are almost certain to get a more tangible reward in the form of tax cuts as elections draw closer in provinces such as Alberta, New Brunswick and Saskatchewan.

NEWS: UK

Insurance companies dispute adverse report

By Ralph Atkins,
Insurance Correspondent

Two of Britain's biggest composite insurance companies are fiercely disputing a stockbroker's report which says they risk "financial impairment" because of their exposure to potentially huge US environmental damage claims.

According to the report by James Capel, Royal Insurance and Commercial Union may face liabilities running into billions of dollars over a number of years unless fundamental changes are made in US environmental protection laws or the balance of court decisions shifts in insurers' favour.

Capel says Royal and CU have a higher risk of exposure than other UK insurers to polluted US sites. But the two companies, whose share prices have fallen recently on speculation about the report's contents, yesterday challenged its attempts to link market share to potential liabilities. They also added that their reserves and reinsurance arrangements were more than adequate to cover any possible claims.

The report's conclusions are based on an analysis of thousands of liability policies dating back to the 1950s. Many such policies are vulnerable to claims under tough US "Superfund" laws which make polluters – and in turn insurance companies – liable retrospectively for clean-up costs.

Capel says Royal and CU are more likely to have provided policies to companies facing the cost of clearing up more than one site. For example, Royal provided cover to General Motors which has been named as a "potentially responsible party" at 61 sites. Royal, however, said its figures were distorted by the cover provided to GM, of which only a small, tightly-controlled part, was for environmental losses.

Mr John Carter, chief executive of CU, said many of the policies identified by James Capel "have not given rise and won't give rise to claims".

James Capel reckons the two companies' local subsidiaries each account for about 2 to 3 per cent of US insurers' environmental liabilities. Using estimates from AM Best, the ratings agency, of the total exposure of the insurance industry, James Capel calculates that in the "best case", future US environmental liabilities of Royal and CU could be about £470m each.

That would represent about 25 per cent and 12 per cent of their market capitalisations respectively. On a "median case" scenario, potential liabilities would be about £2.5bn – two-thirds of CU's market capitalisation and 136 per cent of Royal's.

The Capel study examined possible claims resulting from contaminated sites included on the US Environmental Protection Agency's national priority list, other sites which might lead to claims and possible asbestos-related insurance costs. These were then cross-referenced to records kept by the US Navy Department on insurance policies taken out by companies in the US, to give an indication of individual insurers' exposures.

UK NEWS DIGEST

Human rights blow for Leeson over extradition

Germany is unlikely to object to the extradition to Singapore on human rights grounds of Mr Nick Leeson, the former Barings trader, a German foreign ministry official said yesterday.

"I don't think that this (Singapore's prison and legal system) will play a major role in influencing our decision," he said. The official said the decision on Mr Leeson's extradition would be based chiefly on the strength of evidence of fraud presented by the Singaporian authorities and whether or not the UK presents an extradition request of its own.

The development is the latest setback for Mr Leeson's attempt to avoid facing trial in Singapore. Britain's Serious Fraud Office has already indicated its belief that Mr Leeson will be more likely to be extradited to Singapore because of insufficient evidence with which to charge him in the UK. The German authorities do not have to take a formal decision on Mr Leeson until after the Singaporean authorities submit their request for extradition based on alleged fraud on May 3.
Jimmy Burns, James Blitz and John Mason

Tory MPs face suspension

Two Conservative MPs accused of accepting £1,000 each to raise questions in parliament are due to be suspended from the Commons after the privileges committee recommended tough sanctions. The decision, announced yesterday after months of enquiry, represents the most serious attempt yet by parliament to combat impropriety among its members at a time of deep public disquiet over the ethical standards of politicians.

The report, agreed unanimously by the committee's 17 members, recommended that Mr David Tredinnick, MP for Bosworth, be suspended from the house for 20 sitting days, with suspension of his salary for the same period. It called for Mr Graham Riddick, MP for Colne Valley, to be barred for ten sitting days, with his salary also suspended.

MPs will now have to consider resolutions against the two, which speak of their conduct falling "below the standards which the house is entitled to expect". With no public dissent within the committee, the Commons will be under pressure to confirm the reprimands. The bans would take effect immediately. The government's formal majority would be reduced to 11 for at least two weeks. However, this presupposes support from the nine "Euro-rebels", an unlikely prospect.

Labour strategists are considering whether to exploit Mr John Major's ever-shrinking majority by seeking an opposition motion on Europe or other contentious issues.

The Commons is likely to consider the report on its return from the Easter recess. *John Kampfner*

Elf may sell UK assets

Elf Aquitaine, the recently privatised French oil company, says it might sell its UK refinery and petrol stations unless it can secure a bigger share of the competitive British retail petrol market.

Mr Bernard de Combret, Elf's head of refining, marketing and trading, said yesterday that the company wanted to expand its UK retail petrol network sharply in the next year.

Mr de Combret said the company had too few British outlets to match the capacity of Elf's Milford Haven refinery, which he described as one of the most efficient in the country.

Elf is seeking an alliance or other partnership arrangement that would help boost its UK market share from just under 4 per cent to "a minimum of 5 per cent". Mr de Combret said Elf would consider selling its UK operation, which includes 700 stations and 70 per cent of the Milford Haven refinery, if it failed to secure such an alliance. *Robert Corzine*

DJ to launch TV service

Dow Jones Telerate will, later this month, launch a new specialist television services aimed at market professionals across Europe.

The new service delivered by satellite direct to specially adapted dealing screens will compete directly with Reuters Financial Television which was launched last year. Dow Jones Telerate Live, which launches on April 24, is the latest entrant to a new genre of programming – "discontinuous television."

Unlike conventional television which tries to keep the attention of the audience for as long as possible, both the Reuters service and Telerate Live, seeks to intrude on the audience as little as possible. Apart from morning briefings to start the financial day, Telerate Live aims go on the air only when it has news that is likely to move the markets. *Raymond Snoddy*

Increase in beer imports

Cross-Channel beer imports grew by about 15 per cent last year to an estimated 1.4m barrels, or 404m pints, the Brewers and Licensed Retailers Association estimates. The beer accounted for about 4 per cent of the UK market, up from 3.3 per cent in 1993, the association said, renewing its call for a phased reduction in excise duties. Taxes make up 30.7p of the price of a UK pint of strong beer (5 per cent alcohol by volume) against 4.2p in France.

The imports, duty paid in France, cost the UK Treasury £121m ($196.02m) in excise duties and £60m in value added tax, while the French government gained £33m from British shoppers in Calais and other Channel ports. *Roderick Oram*

Public thinks the government is 'fiddling' figures, concludes a report

Row over unemployment measure

By Robert Chote,
Economics Correspondent

Britain's main measure of unemployment should be replaced because people believe the government is fiddling the figures, according to a report by the Royal Statistical Society.

The headline measure counts people who are without work and who successfully claim unemployment benefit or income support. But the definition of this "claimant count" has been changed about 30 times since 1979, prompting accusations that the government has deliberately massaged it.

"The claimant count is not trusted, is not based on any agreed concept of unemployment, is inconsistent over time due to changes in the claimant system, and cannot be used for international comparisons", the report argues.

It recommends a monthly measure based on the existing Labour Force Survey, which is based on international standards. This involves asking 60,000 people whether they have worked in the past week and are actively seeking a job.

But Mr Phillip Oppenheim, junior employment minister, said a monthly labour force survey would cost an extra £10m on top of the £7m-£8m spent on the current quarterly version. "It is very difficult to justify the cost", he said.

The Labour Party said the report vindicated its claim that the government had meddled with the figures, while Mr Oppenheim said it showed the claim was groundless. Ms Harriet Harman, the shadow employment secretary, said: "This report is more serious even than the deep problem of unemployment. It goes to the heart of the credibility of the government".

The statistical society warned that the claimant count would soon be distorted again by definitional changes. New benefit regulations for invalids are likely to push the count up this year, while the introduction of the "jobseekers' allowance" should have the opposite effect in 1996.

The report argued that there was no need for a monthly measure for economic analysis. Its only justification was political – as a measure of government performance.

The society said the best solution would be to carry out the labour force survey every month, but conceded that this would cost twice as much as the quarterly survey.

Alternatives examined included using the existing survey to generate a three-month rolling average or to calculate a less reliable measure using a third of the quarterly data each month.

But Mr Oppenheim said these would probably confuse people by creating more estimates vulnerable to revision.

The society also recommended that more emphasis should be put on quarterly estimates of unemployment among the young, long-term joblessness, the number of people wishing to work and the strength of people's attachment to the labour force.

UK reserves of gold and foreign currency fell by an underlying $95m in March to $42.8bn (£26.3m), the British Treasury said yesterday.

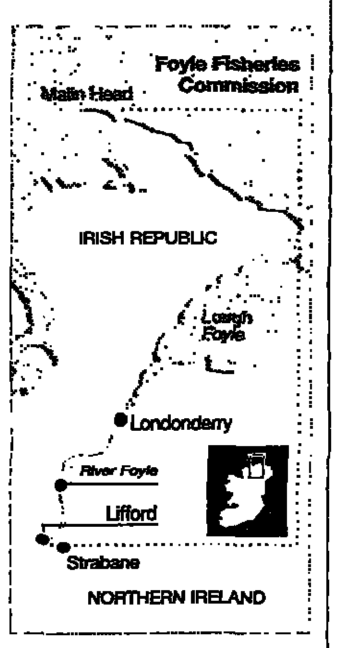
The underlying change excludes a number of other factors which are included in the total change. There were repayments of borrowing under the exchange cover scheme (ECS) of $6m.

The March tender of UK Ecu Treasury Bills amounted to $1,103m and maturing UK Ecu Treasury Bills were $1,106m. Receipts from the second privatisation floatation of GENCO came to the equivalent of $174m.

After the annual revaluation, the reserves stood at $46,122m (£28,330m) at the end of March.

Red tape tries to span Ireland's troubled waters

John Murray Brown looks at the fisheries commission struggling to get off the political hook



A small group of British and Irish civil servants looking after the salmon and trout in the river Foyle near Derry have become an unlikely focus of debate about the political future of Northern Ireland.

The Foyle Fisheries Commission, with a staff of 4 fisheries officials – 2 from Northern Ireland and 2 from the Republic – and 24 river bailiffs, is the only functioning cross-border body with executive powers.

With London and Dublin proposing further cross-border institutions under the recently published framework document, the commission has become caught up in the political crossfire.

For the unionist majority in Northern Ireland, any hint of joint authority smacks of a sell-out, and undermines Northern Ireland's place in the UK. For nationalists, such bodies represent a recognition of Ulster's Irish dimension, and are considered the least that hardline republicans will settle for in any eventual peace settlement agreement.

It all started in September, when the Commission was cited as an example of cross border co-operation by Sir Patrick Mayhew, the Northern Ireland secretary, during a speech to the Grand Order of Orangemen in Comber.

The Foyle catchment straddles the border, draining from the Sperrin mountains as far south as Omagh and up to Malin head on the Republic's side. The Commission is in charge of management and conservancy of a 55-mile stretch of the Foyle plus Lough Foyle – the boundary between north and south, runs through the lough, though the precise line has never been defined – and the tidal river up to Lifford.

The Commission owns the fishing rights, issuing rod and netting licenses and policing the river against poachers. Its annual budget is just £400,000 – half is raised through licensing fees and fines with the shortfall split between the two governments. Its September financial year end is determined by the end of the seasonal salmon run.

As far as having executive powers, – the key grumble of unionists – the Commission can make by-laws to regulate the seasons or set new licence fees. It also has unique powers to prosecute any offender in both jurisdictions.

Under a review by the accountants KPMG, the Commission's powers are to be extended to include the potentially lucrative shellfish sector, currently inactive because of the wrangle over title.

But in the Irish story, even the arcane can be important and the move has prompted criticism from both sides of the border. Mr Hugh McLaughlin of the Greencastle Fishermen's Co-operative in Donegal in the Republic says his members are "exposed to the whim of the Foyle Fisheries who seemed to have absolute authority." Dublin's joint authority, he says, is in "name only."

The concerns of Mr Willie Ross, Ulster Unionist MP for East Londonderry are more serious. Far from being a model of willing cross border cooperation, he says the commission was an attempt by Dublin to "gain a measure of control over what was and still is a United Kingdom asset."

The Commission is "a tiny forerunner of what is currently being attempted over a far wider area."

In Dublin, the reaction to such comments is exasperation. The Commission, they point out, is staffed by civil servants, not politicians as envisaged under the framework document proposals, which begin the process of mapping out in detail how north and south might work closer together. Indeed the view in Dublin is that the cross-border bodies envisaged in the framework document would be far more powerful.

The main tension is between the rival demands of anglers and commercial netsmen.

In the Foyle commission's case, this takes on a political importance because the angling waters are largely upstream in Northern Ireland while the majority of commercial netting takes place in the estuary on the Donegal banks of the lough.

But whatever the political debate, cooperation already has a momentum of its own. The European Commission and the US is funding development of the border counties. In Newtonstewart, a largely protestant town blighted by republican violence, the angling tourism business is growing.

In the 1930s, the town boasted 3 fishing hotels, the fishermen arriving by train from Belfast and via Larne from the mainland. Now, the Castle Hotel is in the throes of renovation. And an old police station has been converted into fishing lodges.

All the lets are taken for the season.

Lloyd's survey sees lower premiums

The downward trend in insurance premium rates is accelerating, according to a survey of Lloyd's of London underwriters which is indicative of mounting world-wide competitive pressures among insurance companies, Ralph Atkins writes.

After several years in which rates have generally risen, the number of Lloyd's underwriters reporting falls over the past three months comfortably exceeds the numbers reporting increases, according to results released yesterday.

Many insurers – not just at Lloyd's – blame overcapacity for the reductions. But Mr David Rowland, Lloyd's chairman, refuted suggestions that falling premium rates would translate into losses for underwriters just as the insurance market may be about to overcome its financial problems.

"Many rates are stable, some are still rising and, where there has been a downturn, it is from a very high base," Mr Rowland said.

Commenting on rates for marine insurance policies, where much of the downward pressure is concentrated, Mr Alan Jackson, chairman of the Lloyd's Underwriters Association, said: "In a competitive situation, it would simply not be possible for increases of the type we have experienced in the past few years to carry on ad infinitum."

Lloyd's aviation insurers appear to have bucked the general trend, reporting stable or rising rates – but only after record world aviation insurance claims last year.

Despite its recent troubles, Lloyd's underwriters often set benchmarks for policy rates around the world. But they face competition in particular from insurance markets in continental Europe and Bermuda.

The survey of 52 underwriters carried out by Lloyd's showed 40 per cent reporting falls in the past three months against 6 per cent reporting increases. The difference between the two figures – 34 per cent – compares with 2 per cent in the last survey released in January.

Asked about expectations for the next three months, 39 per cent of the underwriters surveyed expected decreases and 9 per cent predicted rises. The balance of 30 per cent compares with 25 per cent in the last survey.

Falls were also reported by motor insurers. "Downward pressure on rates was inevitable following the substantial increases in 1992 and 1993, although rates now seem to be stabilising," said Mr George Higginson, Lloyd's motor underwriters association chairman.

Developer 'will see no profit for 20 years'

By John Kampfner
and Simon London

The Japanese company which owns County Hall, the former home of the Greater London Council on the River Thames, is unlikely to pay £10m of the £60m purchase price until 2012, according to a report today.

The National Audit Office, the public spending watchdog, also reveals that Shirayama Shokusan, which bought the property in 1993 after years of negotiation, does not expect to make a profit from the site for 20 years.

The report details the problems faced by the London Residual Body, the organisation established by the government following the abolition of the GLC in 1985, in selling the building.

It says the LRB recommended the original £60m Shirayama bid to the government, ahead of rivals such as the London School of Economics, even though it possessed "no independently verifiable information" about the family-owned Japanese company.

"The Residuary Body recognised that there were risks associated with the lack of a bank guarantee," the report says, but "concluded that they were not sufficiently great to warrant abandoning the sale given, in its view, the attractiveness of the price offered."

It adds that the LRB pressed ahead with a private sale to Shirayama despite government guidelines which encourage the sale of public assets by tender.

In a submission to the NAO, Shirayama said that it considered the purchase a "very long term investment".

"Consequently, the (Shirayama) family has no such illusions or expectations in making any profit from this investment – even for more than two decades," it added.

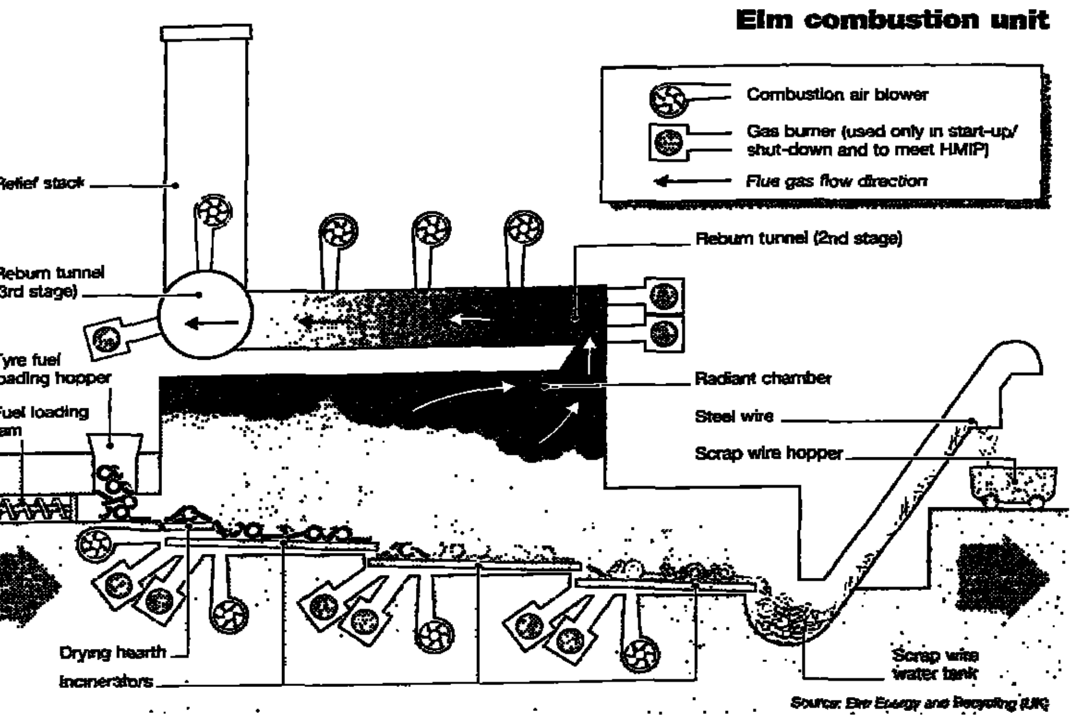
Mr Makoto Okamoto, Shirayama's representative in London, said that the terms of the sale, which linked the payment of £10m to earnings from the development, left the company with no incentive to make a profit.

Mr Alan Milburn, Labour MP for Darlington who referred the sale to the audit office, said yesterday the report showed "one of London's key sites has been treated in a totally cavalier fashion".

"The secret deal between the LRB and Shirayama amounts to an interest-free loan of £10m at taxpayers expenses."

In November, Shirayama announced that work had been suspended on its project to build a hotel, leisure and entertainment complex on the site. It is now reviewing development options pending the outcome of a legal dispute with the LRB.

The Commons public accounts committee will discuss the issue on May 1.



Source: Elm Energy and Recycling (UK)

Tough for tyres

Haig Simonian reveals why incineration is not an easy solution to one of Europe's big waste problems

Anne Evans pauses, considers and then decides: "I'm really proud of it. All first projects can take improvement," she says. "You build on experience. Every month, technology changes."

The project is Elm Energy, Europe's first purpose-built tyre incinerator, based in Wolverhampton in the English Midlands. The plant has recently stepped up to full capacity after opening in November 1993; its five incinerators now devour 100,000 tonnes of scrap tyres a year.

The incinerator absorbs 20 per cent of the UK's scrap tyres, generates enough electricity to light a small town and recycles many spin-off products. Yet it is uncertain whether the experiment will be repeated.

Hailed as a technological and business breakthrough, Elm has had a tough time getting off the ground.

Evans, an evangelist for tyre incineration, left as managing director in January (although she retains a small stake); the plant is still suffering from teething troubles; and the economics of incineration are questionable.

However, the question of burning tyres has a wider resonance. Tyres are one of Europe's biggest waste problems. In 1991, the European Commission identified scrap tyres as the first "priority waste stream" on which pan-European action was needed.

Western Europe alone produces 200m tyres a year. A further 237m are made in the US and about 140m in Japan. Add to that the sizeable output from South America and *East Asia, and the potential tyre* mountain snaps into focus.

Technically, incineration is the ideal means of disposal. Tyres have a higher calorific value than coal because they are composed predominantly of petrochemicals.

The heat they produce can be *used to raise steam to generate electricity*. Their steel content can be recycled, while zinc oxides, in the form of ash, can be used to recover zinc. Elm, which cost £48m, is designed to generate more than 20MW of electricity and to recover up to 17,000 tonnes of high-quality steel and 3,000 tonnes of zinc a year.

Nevertheless the cost of energy generation is still high: "No one would invest that kind of money just to generate power," says one industry observer. Based on the original investment, Elm's electricity costs about $3,400 (£2,138) per MW compared with about $900 for a coal-fired power station and $800 for a gas-fired plant.

The project is suffering from technical hitches which may upset its delicately poised economics. Power output from the incinerators is only now approaching the design capacity – almost 18 months after starting. Furthermore, the output of *scrap steel*, one of the key elements in the budget calculations, is proving impossible to sell because it is covered with ash. Elm admits it will have to install high-pressure water jets to clean the scrap.

Even the economics of electricity generation are fragile. Elm got off *the ground because of the UK government's* "non-fossil fuel obligation", which subsidises electricity produced from renewable energy sources such as incinerators.

But proponents of combustion were deeply disappointed earlier this year when the government rejected two new schemes by Evans for smaller incinerators in Scotland and the south of England.

The electricity to be generated from the new plants – which would have consumed about 20,000 tonnes of scrap tyres each – was deemed too expensive compared with other renewables.

The failure showed that incinerators must be relatively big, and therefore limited in number, to reap the economies of scale required to make such big investments viable.

Evans is down, but not out. Although disappointed by the decision, she is pressing ahead with a plan to create an even bigger incinerator in Belgium, capable of burning up to 120,000 tonnes a year.

Most of the rubber would come *from tyres, but up to 15 per cent* could derive from technical rubbers, such as old windscreen wipers or scrap from tyre factories.

Proponents of combustion were deeply disappointed when the government rejected two new schemes for smaller incinerators in Scotland and the south of England – the electricity would have been too expensive

Technical developments since Elm was devised have made combustion even more appealing financially, Evans argues. Incinerators have also become more efficient and temperature control techniques more sophisticated.

Most important, the technology required to clean up smokestack gases – one of the most expensive parts of an incinerator – has been simplified. Much of the spending on Elm went on complex clean-up processes, admits Peter Fisher, its chairman.

At Elm, combustion gases have to pass through a chamber containing hundreds of bags made of Teflon and impregnated with Goretex, which filter out particulates rich in zinc and fly ash for recycling.

That is followed by a reactor tower where flue-gases are injected with calcium hydroxide to remove sulphur before going on to another baghouse *to filter out spent* lime for recycling. Elm's emissions are well below authorised ceilings, but it comes at a considerable cost.

By contrast, Evans's new venture will require less equipment and manpower while emission standards should be even higher than at Elm.

"The technology has got better and we went on a huge hunt to find the best available," she says.

Greater confidence about the process among bankers has also reduced the bills: when it was looking for investment, Elm was vulnerable because it was the first of its kind in Europe and only the third tyre incinerator in the world.

Hesitant bankers can now see that an incinerator can be built relatively quickly, that local authorities will co-operate and that burning tyres works. These factors have lowered the resistance to give a loan for a new project.

"We can take them to see a plant which is running, rather than just on paper," says Evans.

Elm would never have got off the ground were it not for the enthusiasm of a single entrepreneur. Big industrial investors were interested only once the concept was established. (Elm is now 95 per cent owned by the North Indiana Public Service Company, a medium-sized US utility.)

Evans believes that costs could be sliced if a utility were involved with a project from the start: loans would be cheaper because of the greater security of lending to an established concern. Talks are under way as to whether Electrabel, the Belgian electricity utility, could play that role in the new Evans venture.

Elm's teething troubles should not obscure its achievements. The fine tuning now being done should improve its profitability, says Mark Wyckoff, its new managing director.

The main obstacle to incineration is the limit to the number of plants a country can sustain. Location is crucial. Wolverhampton lies at the heart of the UK tyre industry and is centrally sited on the motorway network. Most of the country's population centres are within easy distance.

One reason why Evans's two small UK projects were turned down was because their peripheral locations meant the cost of collecting tyres would have been so high as to make the price of the electricity they generated uncompetitive – even against most other renewables.

Incinerators are also limited in that they cannot take too large a share of a country's scrap market. Fisher estimates that anything above 30 per cent would drive up *prices and choke off other uses of* waste tyres, such as shredding.

Undeterred, Evans is keen to press on. The Belgian plant, in Limburg province, is ideally located to cover the Benelux countries and much of northern France and western Germany, she believes.

With a third incinerator located somewhere in the former east Germany and a fourth in the southern states of Bavaria or Baden-Wurttemberg, she believes Europe could be comprehensively covered and the tyre mountain diminished if not altogether levelled.

Richard Gourlay on a European fund-raising pilot scheme

EC's venture seedling

Five years ago, the European Commission became concerned at what it thought was a rapid decline in the amount of venture capital going into young companies in the Community.

It was right about the trend. Over the five years to 1993, the amount invested by venture capital institutions in early stage businesses fell by 53 per cent to Ecu200m ($262m), according to the European Venture Capital Association.

Venture capitalists say there are good reasons for this decline: that they were not able to make money within the limited eight- to 10-year lifespan of most venture funds.

The Commission decided to try to reverse the trend. Proffering interest-free loans and a small amount of equity, it sponsored a programme that has led to 23 seed funds being set up and the establishment of the European Seed Capital Fund Network.

With the Commission's five-year pilot scheme winding up in September, the Network's members – now numbering 50 organisations – are meeting in Paris this week to assess the success of the programme.

There is no easy way to measure its success because the purpose of the programme was unclear from the outset. One faction in the Commission decided employment generation should be a target. Others took a more commercial line: they argued that seed funds should set out to build capital, that employment generation was only a by-product – albeit a welcome one – and that Commission funds should not go *to any seed fund unable to raise* its own private funds.

As a result, some of the members in Paris will argue that the Seed Capital Network experiment is a success. The 23 funds will have raised Ecu61m by the end of this year.

They have invested more than Ecu26m, creating 228 new businesses of which more than 80 per cent are still "alive", according to the Network. These businesses have created more than 2,000 jobs – and 4,000 more indirectly.

One of the most striking features is the low cost of each job created. Because public funds were "leveraged", with bank loans and in some cases private equity, the amount of public money required to create each jobwas considerably lower thanin most government job creation schemes.

The purists see it differently. Of the 23 new funds, a handful are truly commercial operations that raised private capital and are run specifically to grow their capital. These include Technostart in Stuttgart, Innovi in Brussels and the Korda Seed Capital Fund in the UK – although this fund has now closed its doors.

The majority of the 23 new funds, however, were political initiatives designed to enhance employment. Critics say that many of the businesses these seed funds back will be marginally competitive at best and are unlikely to thrive.

The Network's own figures lend some support to this argument. Seed funds supported by some private funds created twice as many of the directly created jobs as did those funds supported by public money.

Unperturbed by this less than glowing comment on publicly backed venture capital, French members of the Seed Network are determined to attract more public money to early stage investing. The group will this week tell the French government in a white paper that "only a significant measure of public support . . . will bring investors back to the sector responsible for creating jobs".

***At the European level*, the members of the European Seed Capital Fund Network will this week decide how to go forward now that the Commission has said it will subsidise only the network's running costs.**

While the Commission's pilot scheme has shown that jobs can be created relatively cheaply, few would argue that the programme has unearthed a way to encourage more investment by venture capitalists in young European companies.

مكرر من الاصل

ARTS

Theatre

Parents' worry tapped

Hard upon the wounded heels of Simon Gray's *Cell Mates* at the Albery Theatre comes *One Fine Day*, rushed in from Liverpool. One waits with (somewhat) bated breath to see whether it will last longer. It is a one-man monologue written by *Dennis* Lumbourg, enacted by Joe McGann and directed by Bob Thomson for all it is worth.

As monologues go, this one is lavishly set: three elaborately realistic sets, deftly designed by Julie Godfrey, on the revolving stage. They make the piece more stage attractive; I suspect that they may diminish the force of the play, in which neither sets nor props play any practical part.

For it is a sort of confessional piece, from a young father suspected of abusing his two children: familiar from press stories in all its details, and banal in at least that sense, it needs us to concentrate closely on the central figure if it is to rouse our concerns beyond polite sympathy.

McGann, whose long, lined, humorous face is familiar, plays Eddie faithfully as written, which is to say with a steady peppering of winking one-liners and quick marginal anecdotes. They serve not only as fill (the story is not complicated, and it needed more to make even a short evening), but also as cheerful, reassuring lubrication for the uncomfortable subject matter. The narrative tone is affable and blokeish: Eddie only *tells* us about his worst moments, never has to *show* them.

We watch him from an evening at home before the crisis, in which his continuous chat to us continually returns to sexy childhood stories, to the time when he has had to flee his home, to prison and at last to a conclusion which I will not reveal. (You may need a bit of suspense to keep you going.) It is all honestly felt, but for four or five scriptwriter's lines that stick out like sore thumbs from the surrounding blokery.

By now you will have guessed that the title has nothing to do with *Madama Butterfly*; the sense of "one fine day" here belongs with "...the sky dropped straight down on my head".

The result is well-intentioned beyond doubt, and will certainly tap into many a parent's idle worries (how could I *prove* that nothing happened?) – but it is rather mild. Think of *A Day in the Death of Joe Egg*, which played a desperately painful family situation off against bitterly jokey dialogue: it makes *One Fine Day* seem anodyne and excessively digestible. Amiable, though; and perhaps Joe McGann's long, lined, humorous face is the apple of enough eyes to draw decent houses.

In any case, it is something of a relief that the West End's first show to be concerned entirely with child abuse as a raw social fact, and not just as a piquant element in a further dramatic tale, is so unsensational. It is only a pity that in the part of Eddie, the serious stuff is squeezed into the stand-up comic's style.

David Murray

At the Albery Theatre.

Television/**Christopher Dunkley**

BBC goes fishing in ITV's duck pond

If something walks like a duck and quacks like a duck most people will believe it is a duck, even if it does keep claiming to be a swan. Similarly, if something looks like commer*cial* television and sounds like commercial television, then, no matter how often it declares itself to be public service broadcasting, few people will take much notice.

The thought is prompted by the launch of BBC1's new Saturday evening schedule – unmistakably a duck – after a seemingly endless sequence of BBC reviews and statements all declaring: "We are a swan, we have always been a swan, and we intend to continue being the best swan in the world."

Again and again we have heard the people who run the BBC announcing that their rightful position (new metaphor, forget the duck) is on the high ground of broadcasting, that the BBC must go for the Himalayan option. Again and again we have gone away and switched on the box to watch some of this Himalayan activity only to find the BBC sliding down the Trossachs on a tea-tray.

This is not to say that the programmes in the new schedule are bad examples of their sort. On the contrary, the BBC is only too good at this sort of populist stuff. Saturday evenings now begin with *The New Adventures Of Superman* which is, of course, imported from the US. It is slick, expensively made, funny, and the very cynosure of commercial programme making. The BBC has always been good at choosing American imports and this is excellent family material for early evening. But nobody could pretend we need a public service system to bring it to us.

It is followed by *Confessions*, one of several new series which started this week. If you must have cringe telly, where people are lured into self revelation, this is a pretty mild and harmless example. Nobody is blackmailed into participation with the fear of being ridiculed as unable to take a joke, and embarrassment is not a central consideration. The presenter Simon Mayo, following in the footsteps of Terry Wogan and Noel Edmonds, is moving up (or is it down?) from the role of disc jockey on BBC radio and, like Wogan and Edmonds, he seems to have all the necessary charm and chat.

The show's technique is cunning: three people are shopped by their family or friends and, having then agreed to participate, are required to identify and recount, with as few clues as possible from Mayo, the ghastly incidents revealed to the programme makers by their loved ones.

The participant needing the fewest clues wins the prize, this week a holiday in San Francisco. (It looks wide open to collusion within the family, providing one of you is a reasonable actor.) The cunning emerges when one participant, having been given the clue, asks whether it refers to the time he put his brother's nappy down the loo and flooded Stamford with sewage. No, not that one, says Mayo, deadpan, and so we get two stories for the price of one.

Without the BBC to supply them would British viewers lack such programmes? Would we be denied that highly commercial undertaking *The National Lottery* if the BBC did not show it straight after *Confessions*? And what about the new programme at 8.05, *Bugs*? Here is a drama series which can be seen either as a retro version of those 1960s yarns in which agents such as James Bond and Napoleon Solo were kitted out with the modern equivalent of seven league boots (a missile disguised as a ballpoint pen, a collapsible submarine to hang on your watch chain) or as an update on *The Avengers*.

Since Brian Clemens helped develop *The Avengers* and is described as "consultant" on *Bugs* the similarities are hardly surprising: helicopter chases, lots of beeping gadgetry, two chaps and a chapess fighting the forces of darkness – it all seems awfully familiar. Unhappily it lacks the craziness and humour of *The Avengers* and just looks like countless other black hat/white hat dramas with big hardware budgets.

That being so, you wonder again, what is the point of the BBC producing it.

It is followed, after the news, by *Chicago Hope*, yet another hospital drama series and yet another American import. Fans of medical dramas will notice the difference here: where *Casualty*, *St Elsewhere*, *Cardiac Arrest* and now *ER* all deal in general emergencies, *Chicago Hope* contrives to go up market. Knife waving junkies and nymphomaniacs longing for the touch of a young doctor's hands are notable for their absence.

Instead *Chicago Hope* concentrates on the "Wow, fancy that" element in modern medicine. Thus, in Episode One we had a futuristic device for liquefying and sucking up brain tumours, and an operation to separate Siamese twins which was so complex that entire teams of doctors and nurses had to hold rehearsals.

There is nothing wrong with *Chicago Hope*, which can trace its antecedents straight back to *Dr Kildare* but, once again, the quack and the waddle give it away: it is a duck. What about the new series of *The Lenny Henry Show* which follows? Henry is a funny man, probably better value as a stand-up comedian than as the obsessive cook in the sitcom *Chef!*. Even if there were ominous doses of black consciousness and political correctness in this opening episode (isn't it a little late to be trying to get a laugh out of the Black and White Minstrels?) he is probably as popular as anyone around today.

He does not command the sort of passionate attachment once achieved by Morecambe and Wise, but then who does?

After *The Lenny Henry Show* BBC1 offers football in *Match Of The Day*, more comedy in *The Stand Up Show*, and then an old movie. So although it is described as a "new" Saturday night schedule there is little in it that would surprise a 1965 audience.

Defenders of public service broadcasting are left with the difficult job of arguing that, in order for the BBC to remain in business and produce its special goodies – period drama, serious sports coverage through bad times as well as good, the Young Musician competition, a serious nightly round-up of current affairs or whatever – the BBC must continue to justify the licence fee. And to do that, they say, the swan has to behave much of the time exactly like a duck.

The trouble is that once you become indistinguishable from a duck, as with BBC1's Saturday night schedule, the people who vote you the licence fee – the politicians – are likely to organise a duck shoot.

Surely the BBC's own interests – and therefore the viewer's – would be best served if there were at least something in the Saturday evening schedule that did not look as though it had been fished straight out of the ITV duck pond. Just one swan would help.

Jesse Birdsall, Jaye Griffiths and Craig McLachlan in 'Bugs': lots of beeping gadgetry, and two chaps and a chapess fighting the forces of darkness

Theatre/**Alastair Macaulay**

Details confuse belief

After Easter, Anne Devlin's 1994 play being performed by the Royal Shakespeare Company, is never dull – and yet the mind wanders. The play is about a quintuple sense of displacement: being a woman in a male society, being Irish in England, being Catholic in Ulster, being an unbeliever who has Catholic visions, being a daughter unloved by her mother. Very interesting; but none of the detail of the play rings true. Though it won admiration at its premiere in Stratford last May, a second viewing of it only increases my problems. It is artful, amusing, lively, unbelievable and oddly incoherent.

Greta, who has married an English academic and has had three children, has found that her husband is having an affair; and the experience brings up every aspect of dislocation in her mind. In particular, she sees visions and hears voices. After a time in hospital, she goes back to her native Northern Ireland.

Reunited with her family while her father is dying of a heart attack, Greta continues to be impelled by her voices and visions to various abnormal acts. All manner of issues are brought up pertaining to Catholics in Ulster today, to unbelievers from Catholic backgrounds, to Irishwomen who marry the English, to children of unloving mothers. At the end, Greta, while still moderately batty by some standards, finds some inner peace.

The problem, however, is not in this scenario but in the script and production. Conversations and soliloquies all sound contrived – and yet we are left wondering why the author has, on the one hand, gone to the extreme of contriving a conversation between Greta and her dead father (who sits up in his coffin to chat with her) and, on the other hand, left us with an untidy mass of unresolved information about Greta's psyche and family. Sister Helen's American accent, brother Manus's fiddle-playing and homosexuality: these are among the play's several pointless red herrings which waste our time.

Meanwhile Michael Attenborough's production contains too many details that keep us from believing in the play. An answering machine has no outgoing message. Katharine Rogers, as Greta's sister Helen, is more posey than the character she plays: which reaches an especially silly point in the play's penultimate scene, when Greta is standing on a high ledge and unable to move. Helen says to her "Take my hand", but stands two yards' distance away, proffering a hand that Greta could never reach if she tried. Doreen Hepburn, as Greta's stern mother Rose, and Ann Hasson, as Greta's affectionate but silly sister Aoife, both overdo the bright-eyed Irish cuteness.

Stella Gonet is Greta. As before, the physical bloom she projects from the stage is so appealing, and the phrasing of her every speech is so exemplary, that criticism is almost disarmed. And yet I cannot believe her whenever she shouts, screams, gasps – goes into an intense state – as this character is often required to do. She charms, but never truly disturbs.

Francis O'Connor has designed with skilful economy a single set like an Advent calendar, with various windows and doors that transform it again and again.

In repertory at the Pit, Barbican Centre, WC1.

Concert/**Antony Bye**

Simply the best around

On paper it looked like yet another mass appeal programme of popular classics: Haydn's Symphony No 104, Mozart's D minor piano concerto K.466 and Beethoven's "Pastoral" symphony. But add the magic ingredients of Nikolaus Harnoncourt and the Vienna Symphony Orchestra and you have an evening almost certainly guaranteed to help you understand just why those classics are not simply classics of their time but of our's also.

We tend perhaps to think of the Vienna Symphony Orchestra as the poor relation of the perceivedly more glamorous Vienna Philharmonic, but the VSO has its own no less illustrious pedigree. Some historic first performances include Bruckner's Ninth Symphony, Schoenberg's *Gurrelieder*, Ravel's Concerto for Left Hand and Strauss's *Metamorphosen*, and it has boasted an impressive line-up of conductors, among them Strauss, Furtwangler and Karajan.

It currently gives some 200 concerts a year, a punishing workload which could easily give rise to complacent and lacklustre playing. At Friday's Barbican concert, under Harnoncourt's largely galvanising direction, that danger was, for the most part, triumphantly averted.

For Harnoncourt it was something of a homecoming. He was a cellist with the VSO for more than 15 years, while simultaneously forging his career with his own Concentus Musicus as perhaps the most imaginative and thought-provoking practitioners.

More recently he has made the successful transition from specialist to mainstream conductor, a hazardous but by no means common move these days, as witness the careers of Hogwood, Norrington, Gardiner and others. But as Friday's concert testified, one need make no excuses for Harnoncourt's interpretations: they are simply among the best around.

The "London" Symphony at the beginning of the concert instantly confirmed this. The myth of the genial "Papa Haydn" was dispelled once and for all in an account full of lean and incisive gestures and bold dramatic contrasts. The first-movement Allegro was surprisingly leisurely yet still urgent. In comparison, the slow movement began almost skittishly and drew from Harnoncourt his gift for impregnating every silence with abundant life and making every accompanimental detail vitally important. A voluptuous lingering in the third movement's trio even suggested affinities with Mahler, though the brazen energy of the finale made, inevitably, Beethoven a more appropriate comparison.

Less revelatory, at least by the high standards set by the Haydn, was Mozart's K.466 which, for all the composer's operatic credentials and the concerto's own potential for dramatic interplay, found Harnoncourt a somewhat glacial, unfriendly participant, maybe because the soloist Rudolf Buchbinder was at best merely competent, more often crude.

But a searching "Pastoral" symphony found conductor and orchestra back in their element, persuasively arguing the case, that, in spite of its programmatic subtext, this symphony is as tautly argued as any. The slow movement, in particular, was projected with faultless balance and perspective, each component meticulously shaped and integrated. For once, every minute mattered, the true yardstick by which to measure – as here and in the Haydn – the classic performance of the classic work.

INTERNATIONAL ARTS GUIDE

■ BERLIN

OPERA/BALLET

Deutsche Oper Tel: (030) 34384-01

● L'italiana in Algeri: by Rossini. Conducted by Ion Marin/Carlo Rizzi, produced by Jérôme Savary; 7.30pm; Apr 5, 8, 12

● Lucia di Lammermoor: by Donizetti. Conducted by Marcello Viotti and produced by Filippo Sanjust; 7.30pm; Apr 6

● Onegin: music by Tchaikovsky. Premiere at this venue, choreographed by John Cranko, produced by Reid Anderson and Jane Bourne; 7.30pm; Apr 9 (7pm), 11

● The Girl of the Golden West: by Puccini. A new production conducted by Paolo Olmi and produced by Frank Corsaro. Soloists include Galina Kalinina and George Fortune; 7.30pm; Apr 7

■ BONN

GALLERIES

Kunst-und Ausstellungshalle Tel: (0228) 9171 236

● Russian Museum of St Petersburg: third in "The Great Collections" series. The museum in St Petersburg houses a collection of 500,000 works from which 500 works have been selected for this exhibition to represent 500 years of Russian art and culture; from Apr 7 to Aug 13 (Not Mon)

■ LONDON

CONCERTS

Barbican Tel: (0171) 638 8891

● Yo-Yo Ma: cellist with the London Symphony Orchestra. Sir Colin Davis conducts Tippett and Elgar while Leon Kirchner conducts the UK premiere of his own "Music for Cello and Orchestra"; 7.30pm; Apr 12

Queen Elizabeth Hall Tel: (0171) 928 8800

● Andreas Haefliger: pianist plays Beethoven, Schubert and Mussorgsky; 3pm; Apr 9

● Carmina Quartet: with pianist Andreas Haefliger plays Beethoven, Debussy and Brahms; 7.45pm; Apr 10

Royal Festival Hall Tel: (0171) 928 8800

● Bach: St Matthew Passion: with the Bach Choir and the English Chamber Orchestra. Sir David Willcocks conducts; 11am; Apr 9, 11,

● Michael Nyman Band: with the Orquesta Andalusia de Tetuan. Special concert in which Nyman reworks music from his career and writes for a group of virtuoso musicians who have an understanding of his work; 8pm; Apr 8

● The London Philharmonic: with soprano Amanda Roocroft. Roger Norrington conducts Mahler's "Lieder eines fahrenden Gesellen" and "Symphony No.4"; 7.30pm; Apr 5

● The London Philharmonic: with clarinetist Emma Johnson. Martyn Brabbins conducts Walton, Barber, Dankworth, Weill and Gershwin; 7.30pm; Apr 7

GALLERIES

Royal Academy Tel: (0171) 439 7438

● Poussin: more than 90 works by the French artist; to Apr 9

OPERA/BALLET

English National Opera Tel: (0171) 632 8300

● Don Giovanni: a new production of Mozart's opera. House debuts for director Guy Joosten and conductor Markus Stenz; 7pm; Apr 5, 8, 11

● Madam Butterfly: Puccini's opera, originally directed by Graham Vick; 7.30pm; Apr 6

Royal Opera House Tel: (0171) 304 4000

● Peter Grimes: by Britten. Directed by Elijah Moshinsky and conducted by Edward Downes; 7.30pm; Apr 8, 11

● Salome: by Strauss. A new production directed by Luc Bondy and conducted by Christoph von Dohnányi; 8pm; Apr 7

● The Prince of the Pagodas: by Britten. A Royal Ballet production choreographed by Kenneth MacMillan opens a Benjamin Britten "mini festival" at the Royal Opera; 7.30pm; Apr 10

■ MADRID

GALLERIES

Fundación Coleccion Thyssen-Bornemisza Tel: (91) 420 39 44

● André Derain: approximately 70 paintings selected to represent the painter's different periods; to Jul 10

■ NEW YORK

CONCERTS

Avery Fisher Tel: (212) 875 5030

● New York Philharmonic: with pianist Mitsuko Uchida. Kurt Masur conducts Beethoven's "Piano Concerto No.2" and Shostakovich "Symphony No.5"; 8pm; Apr 5, 6, 7, 8, 11 (7.30pm)

● New York Philharmonic: Kurt Masur conducts Weber, Schumann, Williams and Prokofiev; 8pm; Apr 12

● Pinchas Zukerman: violinist with Marc Neikrug, pianist, plays Mozart, Neikrug and Brahms; 3pm; Apr 9

Carnegie Hall Tel: (212) 247 7800

● Alfred Brendel: an all-Beethoven programme by the pianist; 8pm; Apr 10

OPERA/BALLET

Metropolitan Tel: (212) 362 6000

● La Traviata: by Verdi. Produced by Franco Zeffirelli, conducted by John Fiore; 8pm; Apr 8, 11 (8.30pm)

● The Ghosts of Versailles: by Corigliano. Produced by Colin Graham, conducted by James Levine; 8pm; Apr 7, 12

New York City Opera Tel: (212) 307 4100

● La Traviata: by Verdi. A new production conducted by Yves Abel and directed by Renata Scotto. Soloists include Janice Hall/Oksana Krovytska and Stephen Mark Brown/Richard Drews; 8pm; Apr 6, 8

● Lucia di Lammermoor: by Donizetti. Conducted by Christopher Keene and produced by Tito Capobianco; 8pm; Apr 9 (1.30pm), 12

● The Merry Widow: music by Lehár, English book adaptation by Robert Johanson. Conducted by Eric Stern, directed by Robert Johanson; 8pm; Apr 7, 8 (1.30pm)

■ PARIS

CONCERTS

Champs Elysées Tel: (1)49 52 50 50

● Philharmonic Orchestra of St Petersburg: with violinist Martha Argerich. Youri Temirkanov conducts Prokofiev; 8.30pm; Apr 12

● Philharmonic Orchestra of St Petersburg: with violinist Shlomo Mintz. Youri Temirkanov conducts Prokofiev; 8.30pm; Apr 12

OPERA/BALLET

Opéra National de Paris, Bastille Tel: (1) 47 42 57 50

● Lucia di Lammermoor: by Donizetti. A new production by Andrei Serban. Maurizio Benini and Roberto Abbado (from April) conduct the orchestra and chorus of the Paris National Opera; 7.30pm; Apr 5, 8, 11

■ SAN FRANCISCO

GALLERIES

de Young Museum Tel: (415) 863 3330

● Monet: paintings of Monet's garden in Giverny from the Musée Marmottan. An exhibition of 22 works created between 1903 and 1926; to May 29

OPERA/BALLET

San Francisco Ballet Tel: (415) 865 2000

● Programme Five: includes "Haffner Symphony", music by Mozart choreography by Helgi Tomasson, the world premiere of "Caniparoli" with music by Bach and traditional African choreographed by Val Caniparoli; 8pm; Apr 6 (2pm), 7, 9 (7.30pm)

● Programme Seven: includes "Bagaku" with music by Toshiro Mayuzumi and choreographed by George Balanchine; 8pm; Apr 5, 8

■ WASHINGTON

CONCERTS

Kennedy Center Tel:(202) 467 4600

● Jessye Norman: soprano with pianist Ann Schein in a programme of works by Berg, Strauss, Ravel and Messiaen; 7pm; Apr 10

● National Symphony Orchestra: Elizabeth Schulze conducts Berlioz's "Symphonie Fantastique"; 8.30pm; Apr 6, 7, 8

OPERA/BALLET

Washington Opera Tel:(202) 416 7800

● Carmen: by Bizet. A new production with Denyce Graves in the title role. Ann-Margret Pettersson directs a production by Lennart Mörk. Conductor Cal Stewart Kellogg. In French with English surtitles; 8pm; Apr 7, 9 (2pm)

THEATRE

Arena Stage, Fichandler Theater Tel: (202) 488 3300

● I am a Man: directed by Donald Douglas. Recreation of the Memphis garbage workers strike of 1968 and the civil rights movement; 8pm; to Apr 9

Kennedy Center Tel:(202) 467 4600

● Laughter on the 23rd Floor: Neil Simon's play set in the 1950's heyday of television comedy; 7.30pm; to Apr 23 (not Sun)

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Edward Mortimer

The ban on the bomb

Extension of the proliferation treaty should be unanimous, if not indefinite

Today's meeting between Presidents Bill Clinton and Hosni Mubarak in Washington could be a sticky one. Egypt, for long the prize pupil in Uncle Sam's Middle East class, has lately been making a nuisance of itself on an issue very close to his heart: the extension of the Nuclear Non-Proliferation Treaty (NPT).

The treaty has been in force for 25 years. Under its own terms, that means a decision must now be taken about its future, at a conference of all the signatories which is to open in New York on April 17. The treaty provides three options: it can continue in force indefinitely, or "be extended for an additional fixed period or periods".

A single fixed period can be ruled out. It would amount to fixing a date of expiry, which nobody wants to do. The US, with Russia and almost the whole industrialised world, is rooting strongly for indefinite extension.

The treaty may not be perfect, say the Americans. Obviously it needs back-up in the form of supplier restraint to prevent countries like Iraq, Iran and North Korea from cheating, and counter-proliferation measures to deal with any that slip through the net. But it has helped hold the line against proliferation more successfully than many thought possible when it was drafted in the 1960s. One hundred and seventy-one states have now signed, including South Africa, Ukraine and Argentina – all of which scrapped weapons or weapons programmes to make themselves non-nuclear states. Among those which have not signed, only India, Israel and Pakistan are believed to have nuclear weapons capability.

In short, the treaty is a Good Thing, and should be extended indefinitely so that there are no further doubts about its future. Moreover (say the Americans) this is really the only option since no one is sure what extension for "fixed periods" would mean. If the periods succeeded each other automatically and indefinitely that would be the same as indefinite extension. If not, what would happen at the end of each one of them?

Egypt is one of several non-aligned countries which reject this reasoning. (The Non-Aligned Movement still has some relevance in this context, as the club of developing countries unhappy with US global hegemony.) These countries are not satisfied the five nuclear weapons states authorised by the treaty (US, Russia, UK, France, China) have fulfilled their side of the bargain.

The treaty was presented as a step towards general disarmament. All parties to it undertook, in Article VI, "to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control".

Egypt argues that the treaty is unequal, so long as Israel is allowed not to join it

The non-aligned, which will hold a caucus meeting in New York next week, are not satisfied with progress made under this heading – and feel that such progress as has been made recently (notably in talks on a comprehensive test ban) owes much to the pressure of the approaching NPT deadline. They argue that indefinite extension of the treaty would remove this pressure, giving the nuclear powers a licence to remain nuclear powers indefinitely while preventing any other state from becoming one. Therefore they favour extension for fixed periods, interpreting this as an option to continue the status quo, with a new deadline at the end of a period which the conference is free to decide.

The NPT is an unequal treaty on the global level, in that it divides the world into nuclear and non-nuclear states. Egypt argues that it is also unequal on the regional level in the Middle East, so long as Israel is allowed not to join it. An Egyptian campaign on this issue over the last few months has caused intense irritation in Israel, where there is almost total consensus on the "nuclear option" (a euphemism for Israel's undeclared nuclear power status) as a last-resort guarantee of Israel's existence.

Egypt accepts that this made sense so long as Israel was surrounded by enemies, but finds it unjustified in an era of peace. Israel agrees in principle, but insists that it has to take account of the threat of long-range missile attack from Iraq or Iran. Full regional peace must come first, say the Israelis. Only two years after peace treaties have been signed between Israel and every member of the Arab League, plus Iran, can talks begin on a nuclear weapon-free zone. And now is certainly not the time to raise the issue with the Israeli public, which is currently being asked to contemplate withdrawal from the Golan Heights as the price of peace with Syria.

The US, which shares Israel's anxiety about Iranian nuclear ambitions, seems to have accepted this argument. It regards Egypt's campaign as untimely and tiresome, putting in jeopardy an important US foreign policy goal for the sake of regional prestige, on an issue where no tangible benefits can be expected. But the US has no interest in seeing Mr Mubarak's position weakened either at home or in the region. Mr Clinton will no doubt be content if he gets a promise from the Egyptian president to abstain from lobbying actively against indefinite extension.

The US claims already to have lined up a majority of states for indefinite extension, and says it will be satisfied with a majority no matter how narrow. Others believe the votes are not there yet, and argue that extension by a narrow majority, however legally valid, would seriously weaken the treaty's moral and political force. If the treaty could be given another 25 years of life by consensus, or by an overwhelming majority, that would surely be a better outcome.

The image of an international manager does not always match the reality, says Vanessa Houlder

Culture shock for executives

For most of the past decade, business experts have been promoting the notion of the "international manager" as an inevitable consequence of the increasingly global nature of markets and products.

The reality has not always matched the rhetoric. In spite of the popularity of international comparisons in setting executive pay, the number of senior managers who can move their skills between markets is relatively small.

High-profile examples of executives heading foreign companies, such as Mr Lindsay Owen Jones, the Welsh-born chairman of France's L'Oréal, Mr Bob Bauman, the US-born chairman of British Aerospace, and Mr Gerald Hampel, the Austrian managing director of Same, the Italian tractor manufacturer, are rare.

Moreover, many companies that claim to have an international culture do not practise what they preach. A study of 12 leading multinationals by the Massachusetts-based International Consortium for Executive Development Research, a think-tank, suggested that most multinationals are far less globally minded than they think they are. The companies put relatively little emphasis on issues such as managing a culturally diverse workforce, managing alliances with other companies, and living outside one's home country.

Nonetheless, the creation of "cross-cultural" employees is seen as an increasingly important goal for many companies operating in overseas markets. As a result, they hope to promote the exchange of ideas, expertise and skills, improve the management of cross-border alliances and create the same quality standards around the world.

For example, Logica, the international computing services company, has recently decided to transfer many staff to other countries, so that between 15 per cent and 20 per cent of its staff will be working abroad. This fourfold increase from a few years ago is an attempt to bond the company's fragmented business structure. "It is a way of creating a truly international culture. It is an important glue structure," says Mr Jim McKenna, group personnel director. "There is a real competitive advantage by being able to present the same quality around the world."

Practical difficulties of overcoming cultural barriers are being taken increasingly seriously, according to Mr Kevin Barham of IOC Ashridge, a consultancy and research group based in France. This interest stems largely from companies' experiences with international partnerships in the late 1980s, which often foundered over cultural, rather than strategic, issues.

Research has underlined the difficulties of working with people from different national cultures. Studies by Mr Fons Trompenaars, a Franco-Dutch expert on national differences in business, have demonstrated the divergence of cultures on matters including hierarchy, authority, humour, assertiveness and working hours.

Using a database of the cultural characteristics of 15,000 managers and staff from 30 companies in 50 countries, Trompenaars shows the difficulty of transferring management techniques between countries.

For instance, performance-related pay often fails in countries such as France, Germany, Italy and large parts of Asia, where people tend not to accept the notion that "individual members of the group should excel in a way that reveals the shortcomings of other members". Feedback sessions may motivate US managers, but German managers find them "enforced admissions of failure".

Some management ideas do not translate into other languages. The terms "coaching", "brainstorming" and even "teamwork" are either meaningless or have different connotations in different countries.

Even the most international of companies admit the difficulties in getting different nationalities to work well together. "Multinational teams do not happen naturally – on the contrary, the human inclination is to stick to its own kind," according to Mr Percy Barnevik. He heads ABB, Europe's largest electrical engineering group, which is a textbook example of a multinational business with more than four nationalities on its supervisory board and more than 20 at group headquarters.

The question of how to deal with these issues was aired recently by a group of companies, including BP, the oil major, The Thomson Corporation, the Canadian travel and publishing group; and Marks and Spencer, the retailer, in a seminar organised by the Management Training Partnership, a UK-based training company.

The creation of an international manager has, they agreed, become far more complicated than it used to be in the days when expatriates were sent out "to colonise the world". The task now involves greater sensitivity and cultural awareness than it did in the days when managers sent out by head office felt they could simply tell the local people what to do.

International experience does not by itself guarantee an international perspective or the ability to work effectively in different cultures. Nor do training courses represent a panacea, although they play an important part in teaching managers about cultural diversity and the merits of cross-cultural awareness.

The true cross-cultural manager is, it seems, born and not made. "A lot of it is about the personal drive to succeed which is very difficult to train," says Mr David McGill, head of individual learning and development at BP. "Making someone aware of cultural diversity is something that has to start at day one when they join the company."

Some nationalities are more skilled at cross-cultural management than others. "It is often people who come from smaller countries where there is an element of in-built diversity, such as Belgium or Switzerland, who seem to be the most successful," says Mr Nigel Brockmann, human resources director of the publishing arm of The Thomson Corporation.

Language skills account for part of the success of managers from smaller countries. But linguistic abilities, although important, are not the only skill needed by a a cross-cultural manager. "We have had some people from the UK who go to a continental subsidiary with hardly any knowledge of language but who manage to communicate," says Ms Nicole Huygens, a Belgian-born manager who works in Marks and Spencer's Paris office. "It is an attitude of mind." Humility is an important quality, she says. "You have to accept you are not going to be as confident or competent as you are in your own environment".

This need to adapt to the culture and values of a foreign country, while representing the culture and values of the parent company can be challenging, says Mr Brockmann. "You cannot go completely native but cannot be totally rigid," he says.

Finding these footloose, sensitive and resilient individuals is not easy. There is, for instance, increasing resistance to being moved from employees whose spouses have their own careers.

Also, companies that have undergone rationalisation have been left with a flatter organisation structure and fewer senior positions overseas. Their cost-cutting efforts mean they baulk at the cost of sending people overseas, which traditionally has been some two-and-a-half times the cost of a local manager.

Corporate restructuring has also affected people's willingness to work abroad. Many fear endangering their jobs by lowering their profile at head office when the company is cutting staff.

Companies are adopting alternative solutions, such as short-term secondments and exchanges, and by having multi-cultural project teams.

Another, more profound, solution is to put more emphasis on developing senior managers from the subsidiary's country. Taken to its logical conclusion, this may mean opening the main board to high-flying executives from other countries.

Although this strategy makes it harder for companies to stamp their identity on subsidiaries, it may make the business more acceptable to customers in other countries. Ms Huygens says: "There is more and more reason for international companies to develop nationals for cost and image."

LETTERS TO THE EDITOR

Number One Southwark Bridge, London SE1 9HL

We are keen to encourage letters from readers around the world. Letters may be faxed to +44 171-873 5938 (please set fax to 'fine'). *Translation may be available for letters written in the main international languages.*

Important things have not changed

From Mr C.J. Lord.

Sir, Peter Barker (Management: "In search of a good fad", March 31) says: "What has changed compared with 100 years ago is that, today, everyone in the organisation is charged with contributing to improving its performance."

Does he really believe that commercial and industrial life was so different 100 years ago? I suspect that the principal difference between the practice of factory or any other management today and 100 years ago is that today it is talked about much and acted on little, whereas earlier there was little discussion but much action.

Did the shop floor operator of 1895 have less respect for his manager than does his 1995 counterpart? I doubt it. Did the factory manager of 1895 take less interest in the human problems of his workforce than does 1995's manager? I doubt it. Were there more layers of management than exist today?

The greatest need in British industry and commerce today is the same as it is in politics, the health service, the social services and education: good old-fashioned leadership, which consults, involves, decides, explains and acts; but which also maintains ethical and moral standards that earn the respect of those being led.

C.J. Lord,
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Chester CH1 3SD, UK

No justice in opinion of Canadian fishing dispute with EU

From Mr Royce Frith.

Sir, Your editorial, "Fish wars" (March 31), suggests there is some justice in letting EU boats continue taking their "traditional" 75 per cent of the halibut catch. I disagree.

You may not be aware that over the past three years, while Canada has dramatically reduced its catch to conserve the stocks, the Spanish catch has skyrocketed. It went from 5,000 tons in 1989 to 50,000 tons last year.

To give in now fully to the Spanish demands is to reward the bad conservation practices which forced us to act in the first place.

Royce Frith,
high commissioner,
Canadian High Commission,
Macdonald House,
1 Grosvenor Square,
London W1X 0AB, UK

From Ignacio Suárez-Zuloaga.

Sir, Your editorial, "Fish wars", is full of moderation and common sense but forgets key issues in this matter.

First, that the capture of a vessel in international waters is an act of piracy. We all remember the British policy of not negotiating with aggressors because this encourages further violations of the law. Do you remember the attitude of the British government in your fishing conflict with Iceland?

Second, you forget that Canada has completely devastated its 200-mile exclusion zone (traditionally the richest fishery in the world) in only 12 years. Only when its fishermen exhausted their fishing reserves did the Canadian government start to care about ecology and the future of maritime species.

Third, if national waters continue expanding, free navigation is going to come under increasing pressure. These new artificial borders will expand and we will soon see border nations demanding fees for crossing "their" waters: defence controls, pollution and danger of accidents may be good excuses for this practice.

Fourth, you forget that Spain is the largest per capita consumer of fish in Europe. It has the largest fishing fleet, and we are seeing how our fishermen lose their jobs as they are expelled from one fishing place after the other.

We have observed how Canada and other nations, with neither consumption nor fishing tradition, build fishing industries with the purpose of expelling foreign fishermen and then exporting to their countries. This is not an issue of ecology, it is an issue of economy.

Ignacio Suarez-Zuloaga,
Serrano 111,
28006 Madrid,
Spain

Not much demand for this facility

From Mr Nick Tyrrell.

Sir, I can only imagine that John Griffiths (Motor Racing, March 25/26) means to advocate *lebensraum* as a solution to Nigel Mansell's cockpit discomfort.

What a Grand Prix driver might get up to given sufficient *liebensraum* is best left to the imagination – although even the most dynamic of today's new breed is unlikely to want to make full use of such a facility at 200mph on the start/finish straight.

Nick Tyrrell,
Bak Oxford International,
Peter Merian-Strasse 23,
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Switzerland

Nation with a liking for inflation

From Mr Fabian Finlay.

Sir, Samuel Brittan asks (Economic Viewpoint, March 30): "Why, nevertheless, do most voters seem bitterly dissatisfied?"

Any government that sets out to defeat inflation in the UK must expect that its reward is to be voted out of office.

The British people have a great liking for inflation and it will take more than the life cycle of one government to cure them. They like having substantial nominal increases in salary every year. This makes them feel richer even though they are not.

The Tory voting classes also have a deep-rooted love affair with house price inflation on which all their ideas of wealth creation are based.

It will be to the great credit of the present UK government if it continues to hold down inflation through to the next general election – and it will be to the discredit of the nation if it is voted out of office in consequence.

Fabian Finlay,
investment manager,
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9 North Audley Street,
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UK

Global warming a fact, despite imprecision

From Dr R. Russell Jones.

Sir Mr Turundi (Letters, March 30) claims that the Organisation of Petroleum Exporting Countries is "not trying to sabotage the Berlin conference on climate change", but then goes on to state that there is doubt about the science of global warming. I am not sure what "independent" research and forecasts Mr Turundi is referring to, but he must recognise that the scientific reports produced by the inter-governmental panel on climate change represent the consensus view of the scientific community worldwide. He should also realise that global warming is not just a theory: it is an inevitable consequence of releasing greenhouse gases into the atmosphere and depends upon world population, the increasing demand for energy and the burning of forests to free land for cultivation.

There may be legitimate doubt about the speed of this process, and whether one can attribute current freak weather conditions to the effects of global warming, but one cannot deny it is happening. The past decade saw eight of the 10 hottest years this century and current temperature trends match predictions precisely.

Any scientific discovery which impinges upon established industrial practices will generate criticism, and opposition can be expected from those companies and, indeed, those countries which profit from the burning of fossil fuels. But no one should be deceived by their position or believe that the science of global warming is so uncertain that remedial measures can be postponed indefinitely.

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Wednesday April 5 1995

False options on employment

It is just over a year since representatives of the main industrial countries gathered in Detroit for a special G7 jobs summit. The aim of US president Bill Clinton's conference was to highlight the labour market as an urgent concern for all rich country governments. Yet the political response – on both sides of the Atlantic – remains at best paltry, and at worst, profoundly damaging.

In the US, the spectre of a rising urban "underclass" of low-paid, under-employed workers has built support for drastic policy remedies. The Republicans' welfare reform legislation, now awaiting a vote in the Senate, stops short of abolishing the US welfare system altogether. But the basic aim is a negative one: to free state governments to be as parsimonious as possible in their support of unemployed families. In the absence of positive measures to boost employment and take-home pay among the unskilled, punching further holes in America's already frugal social safety net will almost certainly increase urban poverty and crime rates, not decrease them.

European debates about unemployment have lately focused on other possible causes. Many blame developing country trade for falling wages and employment among the unskilled; arguments for a protectionist response are gaining popular support.

At the government level, more attention has focused on measures to deregulate labour markets, although modest measures along these lines in France, Germany and elsewhere have met stiff political resistance. Meanwhile, unemployment rose to 11.2 per cent of the west European workforce last year.

A report published today by the London-based Centre for Economic Policy Research casts Europe's unemployment problems in a fresh and revealing light. The authors argue that all three of the most prominent explanations are flawed. Neither the state of different countries' welfare systems, nor developing country trade, nor "rigid" labour markets, can on their own explain the recent rise in unemployment, although the third may have played a part in allowing it to persist. More important have been a lack of innovation by companies, and uncompetitive product markets.

The report favours more widespread deregulation of labour markets, but only as part of a many-sided approach to raising employment among the unskilled. This would include provision of more resources to in-work benefits for the low-paid, and a more vigorous approach to encouraging competition.

In Europe, at least, none of these measures would be overtly controversial, and all can be expected to have a positive effect on employment. Vigorous support for a number of modest solutions – to the right problems – would be a sizeable improvement on the misguided search for "big" solutions which has typified the past year.

African tragedy

Like Bosnia three years ago, Burundi is sliding into a genocidal war which everyone can predict, yet seemingly no one can prevent. The protagonists are the same two ethnic groups involved in last year's genocide in neighbouring Rwanda.

In Burundi, as in Rwanda, German and later Belgian colonisers identified the Tutsi as the aristocracy, and used them as the instrument of indirect rule. This had the effect of consolidating their power, and of sharpening resentment against them among the Hutu, who form a substantial majority of both countries' populations.

The two groups speak same the language. Differences between them were originally socio-economic rather than racial. But history has given them an all too clear sense of their own, and of each other's, identity. The Hutu, seeing themselves as oppressed, have stressed the ethnic difference, while the Tutsi, at least until recently, have sought to dismiss it as an invention of colonialism.

In Rwanda the Hutu seized power in a revolution just before independence in 1962. Burundi by contrast became independent under Tutsi leadership, and its army is still overwhelmingly Tutsi. This is a vital difference. Last year's violence in Rwanda was genocidal in the full sense of the term: Hutu militias carefully planned the wholesale extermination of the Tutsi, with the connivance of the then government and armed forces. In Burundi the Tutsi army seems to be using sporadic massacre as a way of terrorising the Hutu into continued submission. No doubt the Tutsi fear that majority rule in Burundi might lead to a genocide against them similar to what took place in Rwanda. But the methods the army is using make that in the long run more rather than less likely.

Events in Burundi are discouraging for advocates of preventive diplomacy, the fashionable nostrum of a world community dismayed by the cost and difficulty of peacekeeping and conflict resolution. A great deal has been done in Burundi over the past year-and-a-half to try to avert the worst, notably by the resident special representative of the UN secretary-general, Ahmedou Ould-Abdallah, by the UN high commissioner for human rights, and by numerous non-governmental organisations. But the Greek tragedy goes on.

In seeking to do more the international community should focus on identifying and prosecuting individuals responsible for incitement to genocide, on jamming the radio stations they use for it, and on providing financial and technical support to serious and peace-minded newspapers and radio stations. Postmortems on ethnic conflict always highlight the role of the media in bringing it about. Providing balanced and objective reporting, or helping local journalists to do so, may be the most important contribution the outside world can make.

Bias and the BBC

The BBC made a mistake in scheduling a television interview with Mr John Major for Monday this week, three days before the local elections in Scotland. But the delay imposed by the Scottish courts on the transmission of the programme north of the border sets a dangerous precedent.

Unlike the independent television companies, the BBC is not legally bound by the Broadcasting Act to provide balance in its political coverage. As a public service broadcaster it instead has its own guidelines to ensure it cannot be accused of political bias.

These rules decree that, over time and across the range of the corporation's television and radio outlets, it should provide balanced and impartial access to all political parties. More detailed requirements for election campaigns state, quite obviously, that the necessary neutrality should be achieved over a much shorter timescale and, where possible, within programmes.

The decision to conduct a 40-minute interview with the leader of the Conservative party so near to the Scottish elections might well have breached that rule. A leaked memorandum from the corporation indicates that the Panorama interview was certainly a borderline case. To suggest, however, that the BBC was unwise does not imply that the Scottish judges were right in delaying the programme's transmission.

When politicians demand impartiality on television and radio what they really want is favouritism. The opposition parties which challenged the BBC's decision were not fighting for constitutional principle. Instead they wanted to replace what they feared might be good headlines for Mr Major with damaging reports of a political row. The Labour party was keen to flex its muscles to ensure the BBC did not bend in the face of a recent spate of Conservative attacks over alleged anti-government bias. The Liberal Democrats and the Scottish National party have long demanded more coverage than merited by their electoral support.

The BBC is not infallible in meeting its obligations. Recent criticisms from Mr Jonathan Aitken, the chief secretary to the Treasury, about aggressive questioning by interviewers should be dismissed as whingeing. Politicians afraid of the tough question should look for work elsewhere. But television and radio news output too often does appear to lack a steadying hand at the tiller. It suffers from the breathless reporting of alleged "gaffes" seen by young political journalists as a prerequisite for slots on the bulletins.

None of this is evidence of political bias. The constant harassment of programme-makers and executives by the politicians has long made it harder for the BBC to enrich straightforward reporting with balanced, informative analysis. If the courts now assume a role in second-guessing decisions on individual programmes that task may become impossible. The BBC is not perfect, but take a look at the politicians.

The gilt-edged rescue package

Jean Peyrelevade, chairman of Crédit Lyonnais, tells **Andrew Jack** and **Andrew Gowers** of his plans for the bank

Mr Jean Peyrelevade says he demanded one thing in late 1993 when Mr Edouard Balladur, the French prime minister, offered him the chairmanship of the troubled state banking group Crédit Lyonnais: total support.

Two and a half years later, with an outline rescue package to clean the bank's balance sheet agreed with the government, Mr Peyrelevade feels he has received it, without ever having to ask the prime minister again.

Under the plan, which has been sharply criticised by competitors and politicians, some FFr135bn (£17.4bn) of the bank's assets will be hived off into a separate company and sold over the next few years. The FFr50bn in losses which this process is expected to generate will be underwritten by the state, and – in theory at least – repaid by a combination of Crédit Lyonnais's future profits and the proceeds of its eventual privatisation.

"I believe it is a balanced plan," said Mr Peyrelevade, relaxing with a cigar during an interview in preparation for the bank's announcement today of 1994 losses of FFr12bn. "Unfortunately what we have demanded is absolutely indispensable to clear the balance sheet and have a chance to return rapidly to profit."

For a man who has just been through a gruelling six-month negotiation with the government on the shape and scale of the rescue package, Mr Peyrelevade seems positively cocky. This is partly because he feels events have vindicated the warnings he had issued from the outset about the legacy of the bank's reckless expansion during the 1980s and early 1990s.

He says that when he came to Crédit Lyonnais, after five years as head of Union des Assurances de Paris, the insurance group privatised in 1993, he told Mr Balladur that the bank would have to write off losses of FFr30bn.

That was far more than anyone else expected at the time, and accumulated provisions and losses are now likely to be more than three times this amount. For a long time Mr Peyrelevade says he was on his own in warning of the problem.

"I shall never forget November 1993 to November 1994. No-one believed what I said. Everyone said I was exaggerating the losses. They were convinced I was playing poker till the last minute. In fact, my estimates at the time were too low.

"I expected that it was going to be tough, but it was worse. I was certainly too optimistic. I am willing to accept criticism on that point, but on one condition: only from people who were more acute than I was. I haven't found them yet."

How does Mr Peyrelevade think the bank was brought to this pass in the first place? He rejects suggestions that much of the losses resulted from fraud. For him, the culprits are the bank's previous management and, more generally, France's distorted system of corporate governance.

"In French companies the chairman is a complete monarch by the force of law, and necessarily the chief executive. I can do *anything* – make any kind of decision – without any kind of internal discussion. I think this should be changed.

"We need something like the Cadbury code [the UK code on corporate governance], but we must change the law. France is incapable of respecting professional codes. Everything not forbidden by law is considered acceptable."

Since arriving at the bank, Mr Peyrelevade has introduced a four-person executive committee – including himself – which meets every week for candid debate on all important decisions. He has also created an independent audit committee – on which he does not sit – to watch over the bank. Such reforms, he suggests, mean the mistakes of the past are unlikely to be repeated at Crédit Lyonnais.

How much of a change do they really represent? Sceptics have pointed out that members of the executive committee are his long-standing friends and associates. "How else can I recruit people?" he asks in return. "I have all the legal power so I can only delegate to people I trust."

The most forceful criticism of Crédit Lyonnais in recent weeks has come not from taxpayers angry at having to pay up for the bank's past mistakes, but from within the close-knit world of French banking – specifically, from Mr Peyrelevade's two largest private sector competitors, Société Générale and Banque Nationale de Paris.

Since details of the rescue package started to emerge, the two banks have launched an unprecedented assault on their rival. They suggest the plan amounts to a severe distortion of competition in the French market, and that it does not impose tough enough conditions on Crédit Lyonnais. Mr Peyrelevade is visibly irked.

"I am very unhappy with their attitude," he said. "I was not informed before they went public, even out of pure courtesy. They are seeking to get rid of a competitor. I think the majority of French banks disagree with them, and all the international banks I have spoken to have said the plan is good."

Somewhat cheekily, Mr Peyrelevade even argues that his two rivals "should be grateful" for the plan. Without it, he says, they might have been forced to stump up for the losses themselves.

"Article 52.1 of the French banking law: any shareholder has to support an ailing bank," he recites from memory. "Article 52.2: if it cannot, the central bank may invite the financial market to bail it out."

There was in any case little alternative to the rescue in its current form, he says. Apart from the legal issues, Crédit Lyonnais would have had to be salvaged under "a principle applied everywhere in the world: the bank is too big to fail".

Splitting up the bank and selling it off in pieces would destroy its value, while placing it in receivership and attempting to find a buyer would be impossible without a government guarantee almost identical to the current plan.

With relish, Mr Peyrelevade points to a historical precedent. In 1932, Banque Nationale du Crédit ran into difficulties and needed a government rescue. Its bad loans were hived off and financed by the government. All debts were paid off by the bank, with the last payment made to the French treasury in 1962. The healthier part of the bank later merged with BNP.

But isn't Crédit Lyonnais still being let off too lightly? Its competitors complain, for example, about the return the state-owned bank will earn on its hived-off assets. Under the complex terms of the deal, this is below market rates but well above what the assets would yield without government subsidy.

Mr Peyrelevade is unrepentant. The terms of the rescue were as tough as they could be without pushing the bank into insolvency. Anything harsher, he hinted, and he would not find it easy to carry on. "I don't enjoy playing impossible games. Any tightening in the conditions would make the bank very difficult to turn around."

In one respect, Mr Peyrelevade concedes there is some artifice to the deal. Theoretically, it should run over 20 years. But the chairman admits the terms of the game will change radically at privatisation, which could happen within five years.

In particular, he says, the "special dividend" of profits to be extracted by the state could not be continued after privatisation, and would be abandoned, "with some compensation". The government, he implies, has an obvious interest in privatising Crédit Lyonnais as a going concern rather than in shackles.

For the time being, the biggest uncertainty concerns whether the European Commission in Brussels will veto the Crédit Lyonnais plan as anti-competitive state aid. Mr Peyrelevade refuses to divulge discussions he and the government have held with Brussels, but thinks a rejection "unlikely".

His main interest now is looking forwards. "Our first objective is to return to profits," he said. That means further cost cuts and job losses, asset sales over and above those intended under the rescue plan, and a concentration on core areas: retail banking in France and neighbouring countries, and wholesale banking and capital market activities around the world.

"We need to reconstitute our systems of management control. We have a solid senior management layer. The greater challenge is changing the spirit and culture of middle management to leave behind the idea of universal banking."

With state support assured, the real task of creating an independently viable bank has just begun.

Falling sales of UK unit trusts are more than a blip, say **Gillian O'Connor** and **Richard Wolffe**

Retail investors retreat

British retail investors seem to be fast losing interest in unit trusts, the open-ended equity mutual funds which are one of the most important vehicles for UK personal investment.

As the peak season for unit trust sales draws to a close this week, with the end of the tax year, the figures look grim. Net sales of unit trusts to the public have collapsed recently, falling to £92m worth of units in January and £88m in February compared with £524m and £537m respectively last year.

Investors are traditionally enthusiastic about unit trusts when the stock market is rising but pull back when it goes into reverse. But there are signs that this drop in sales is more than just a blip – and that even if the market improves, unit trust sales will remain comparatively sluggish.

Unit trusts are increasingly sold through personal equity plans (Peps), which accounted for almost 50 per cent of all unit trust investment last year. Peps offer tax-free income and gains on up to £6,000 invested in each tax year, and towards the end of the tax year there is always a sales drive to encourage investors to take advantage of their annual tax-free Pep allowance.

But investors influenced by tax advantages have learnt that the stock market has a way of offsetting such considerations. The market peaked in February 1994, and has failed to show any sustained and convincing signs of recovery since. Most people who bought trusts in late 1993 or early 1994 will be showing a loss after 12 months. Understandably, they are not in a hurry to go back for more.

Even the more sophisticated investors seem to have lost confidence in unit trusts in favour of keeping their money on deposit. While unit trust sales have declined over the past 12 months, building society savings have recovered substantially. Net receipts stood at £519m in February compared with net withdrawals of £404m in the same month last year. It is four years since the level of building society receipts last ran as high.

The same trend is evident in direct stock market dealings by active private investors. Sharelink, a leading telephone-based private client stockbroker, made a loss in the first half of last year and last week said that it was discussing a bid.

The picture is depressing for the fund management industry, which has attempted to convince investors that the total return on unit trusts – the income plus capital growth – is a better investment over the long term than alternatives such as building society accounts. But investors seem to prefer immediate income to long-term total returns.

The industry has hope left: from this summer, Peps are to be allowed to invest up to 100 per cent of their funds in corporate bonds. Bond Peps investing in these fixed-interest securities should be able to offer investors tax-free yields of about 8 per cent, which is competitive with most rival high-income investments. The sales message will be that they offer a higher income than building society deposits, with less risk than equities.

But in spite of this new type of trust, there are other threats to the industry on the horizon.

One of these is on profit margins where pressure is already intense. Management groups have traditionally raised charges in two ways: through an initial charge at the time of the investment of anything up to 6 per cent of the amount invested; and through annual charges averaging about 1¼ per cent of the value of the unit trusts. But many management groups are now abandoning the initial charge on many of their funds to win market share.

Another is that later this year, unit trust salespeople could have to follow life assurance companies in disclosing charges to customers. This is likely to scupper fund managers' attempts to increase annual charges to replace initial charges.

Meanwhile, new competitors are moving into the market, including Mr Richard Branson, chairman of Virgin group, the airline and leisure concern. His plans to market a cheap and simple index-tracking Pep under the Virgin brand name are scaring the industry. Mr Branson is just the latest competitor: banks, building societies and life insurance companies have also entered the market.

Some in the industry argue that the squeeze on profitability will force medium-sized companies out of the business, or into the arms of predators. If so, the outlook is not good for the 166 fund management groups that manage more than 1,500 UK unit trusts.

Indeed, some of the more nimble groups seem to be selling out while they still have something left to sell. Last week Jupiter Tyndall sold itself to Commerzbank, Germany's third largest bank. This week Govett & Co put both its UK and its US fund management sides up for auction after the collapse of a move to acquire Duff & Phelps, a US-based fund manager.

The scramble to buy fund managers such as Jupiter Tyndall and Govett is as yet a pale imitation of the rush for British stockbrokers that preceded Big Bang, the stock market shake-up of 1986. But the market in fund management groups appears to be distinctly healthier than the market in unit trusts.

OBSERVER

Ballad of a hitcher

■ Hitch-hiking can be a risky business in France, as elsewhere. Just ask prime minister and presidential contender Edouard Balladur, who last month tried his hand at the art of *l'auto stop*.

The official version is that heavy fog forced Balladur's helicopter to land, en route to a rally in Arles. But his luck was in – a passing female motorist in a Mercedes obligingly gave him a lift to his destination. The adventure gave a timely boost to Balladur's efforts to appear a bit more, well, sexy. But Balladur's opponents now suggest the escapade was a set-up.

Pierre Moscovici, treasurer of the Socialist party's presidential campaign, yesterday alleged that Balladur's adventure was scripted and that the helpful chauffeuse – Claire Lacaille – is a relative of Georges Tron, a Gaullist deputy and Balladur ally.

Yes, Tron is a distant cousin of her husband, says Lacaille. But in an interview with AFP, the French press agency, she added that "we do not have any contact with him". She is irked: "I regret these insidious allegations. I can assure you that it was pure chance. Besides, how would Mr Balladur be able to order the fog?"

Balladur's aides also shrug off Moscovici's allegations. "Do you think we would have arranged to have a Mercedes pick him up? It would have been better to have a Renault," said one. But Moscovici scents scandal: "Do you think that in other countries this would not have consequences?" he asked. "I think that in the US, the candidate would have to withdraw," he added.

Last word to Lacaille: "Moreover, I can tell you that while I vote for the right, I won't vote for Balladur and I have no intention of changing, even though I liked him." Cold shoulder on the hard shoulder.

Use your head

■ Hardly imaginable, a few years ago. A half-lifesize plastic version of the Mount Rushmore heads of US presidents George Washington, Abraham Lincoln, Thomas Jefferson and Theodore Roosevelt, is about to be erected in Moscow's Gorky park.

The German construction group FAB is putting up the replicas as part of a new leisure centre in the park, backed by an anonymous Russian businessman living in Germany.

All we need now is giant plastic heads of Lenin and Stalin to go up in New York's Central park, and the world will have come full circle. Or something.

When in Rome

■ Rome is going potty about Keats, the 19th century British Romantic poet who was buried in Rome in 1821. This year Italy's capital is celebrating the bicentenary of his birth in style. Poet (and Keats biographer) Andrew Motion has been, English literature professor and Bob Dylan expert Christopher Ricks is due, as are novelists Penelope Lively and P D James.

Given the melancholic condition of contemporary Italian politics, the Keatsmania seems entirely appropriate. Keats's "negative definition" fits contemporary Rome like a glove: "When a man is capable of being in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason."

Take good note

■ The protracted debate between EU member states over the magical goal of monetary union is tricky enough – but nothing compared to the struggle for the design of the Ecu banknote.

After months of debate, a sub-committee of the European Monetary Institute has narrowed the choice down to two alternatives: an identical note for all member states, or a note with one standardised side and a side which will be different for each country.

A decision is promised for later this year. That will just leave the bureaucrats with the terrifying battle over what the pattern itself should look like.

Maybe they can fix that one in time for the more likely deadline of about 1999, if not the planned date of 1997.

Berlin stinker

■ Keep an eye out for Silje Schei Tveitdal, a 20-year-old Norwegian student. She popped up at the Berlin conference on climate change – remember that? – this week, causing a stink by asking if it could end its own hot air. "Can anybody tell me what's happening at this conference?" she asked.

Taking to task Australia, Canada, Europe and the US for failure to act, she also lashed out at Norway and its prime minister, Gro Harlem Brundtland. Said Tveitdal: "She's the one who stated that the important thing is to think globally and act locally. I couldn't agree more. The problem is that she forgot to do anything about the emissions of her own country. Instead she has made Norway the second-largest oil exporter in the world."

She should go far – although perhaps not in Norway.

Pate on the back

■ A correspondent writes to the Tampa Tribune: "I was appalled at the graceless way your editorial writer attempted to deliver the coup de gras to the Florida Orchestra . . "

Too meaty a performance, no doubt.

The Financial Times

100 years ago

US markets very dull
New York: Business was very dull at the opening in Wall Street today and continued on a very restricted scale throughout the session. The sales totalled only 161,573 shares.

An unfavourable view appears to be generally taken in the Street with regard to the report of the Canadian Pacific Railway.

A ridiculous canard gained currency today to the effect that the Queen was dead. The story was, of course, soon ascertained to be without foundation.

50 years ago

Stock Exchange takes action
The Stock Exchange Council is amending its wartime temporary regulations regarding permission to deal in order that the House should fall into line with the Treasury's new capital issues policy, which bans dealings in private placings for at least six months.

At the same time the Council has drawn up instructions to members which set forth the procedure to be followed in applying for permission to deal in securities placed with institutional buyers. This is to enable applications to be made at the time of the placings.

FINANCIAL TIMES
Wednesday April 5 1995

Claes admits to 'error of judgment' in affair

Nato chief not to quit despite bribery scandal

By Bruce Clark in Brussels

Mr Willy Claes, Nato secretary general, said yesterday he had no intention of resigning over a bribery scandal, but acknowledged an "error of judgment" in the affair.

"I see no reason for me to resign. I am innocent," Mr Claes told journalists in his first public comment on the affair in the past month. He argued that he still enjoyed the confidence of Nato's 16 members and had received messages of support from many senior politicians.

The controversy centres on the Belgian government's decision in 1988 to purchase helicopters from the Italian company Agusta. In his most detailed account of the affair to date, Mr Claes said the choice was made well before the leaders of his Flemish Socialist party were told that Agusta was prepared to make payments to party funds.

Mr Etienne Mangé, the party's former treasurer, who is now in custody, has admitted accepting a payment from Agusta of BFr51m ($1.8m) for party coffers, and investigators are still trying to find out where the money went. Mr Claes, a veteran socialist politician, was economic affairs minister at the time.

Mr Claes said yesterday that he and several other senior socialists had firmly instructed Mr Mangé not to take any money from Agusta after the treasurer told them in January 1989, that the party could "obtain its own piece of the cake".

The Nato chief said that in the light of subsequent revelations that Mr Mangé ignored these instructions, "we should not have had so much confidence in our own authority in directing Mr Mangé to refuse any financial contribution".

However, Mr Claes stressed that the Belgian cabinet's final decision to buy Agusta helicopters had been taken on December 9 1988 with the approval of all four parties in the ruling coalition.

As economics minister, he had submitted to his cabinet colleagues a report on the economic offsets associated with the helicopter deal. However, the Belgian military had already decided in favour of Agusta, over rival bids from France and Germany, before his ministry's report was drawn up.

"I have nothing to hide, I can look everybody right in the eye," said Mr Claes, adding: "I have said clearly to the judicial authorities that I am at their full disposal to help them."

Mr Claes said he saw no reason why he should take responsibility for the fact that his former long-serving chief of staff, Mr Johan Delanghe, had also been taken into custody.

"Having thought long and hard about the matter I believe it my duty not to abandon ship but to steer the alliance through these difficult and challenging times," the Nato chief said.

He went on to give a grave assessment of some of the main challenges facing the Nato alliance. Mr Claes acknowledged that a host of unresolved issues was piling up on his desk, including "relations with Russia, new models for US-European co-operation and bitter quarrels between Greece and Turkey".

UK prime minister John Major (left) and US president Bill Clinton in discussions at the White House yesterday. President Clinton insisted relations between the UK and the US had not been severely damaged by his recent row with Mr Major over the Northern Ireland peace process. Mr Major earlier held talks with Bob Dole, the Senate Republican leader Picture. AP

Crédit Lyonnais chief warns on rescue bid change

By Andrew Jack in Paris

The chairman of Crédit Lyonnais, the loss-making bank controlled by the French state, has warned that any attempts to toughen the terms of the government-backed rescue announced last month would risk jeopardising the survival of the group.

Mr Jean Peyrelevade, in an interview with the Financial Times ahead of the bank's annual results due out today, called for radical changes to the system of corporate governance in France, with new laws that would force a delegation of power from the grip of the chairman-chief executive.

His comments were triggered by criticisms from French politicians and leading banking competitors that the requirements on Crédit Lyonnais were too lenient in a rescue plan which allows it to remove FFr135bn ($28bn) in assets from its balance sheet for sale, in a process underwritten by the government.

"I don't enjoy playing impossible games," said Mr Peyrelevade. "Any tightening in the conditions would make the bank very difficult to turn around."

He said the criticisms of the plan – principally launched by its two leading rivals Société Générale and Banque Nationale de Paris – were not shared by many other banks and it appeared they were simply seeking to "get rid of a competitor".

Mr Peyrelevade also rejected as "nonsense" his rivals' calls for the sale of the assets hived off the balance sheet to be managed by an independent body.

"I would be very pleased to give it up, but it would be stupid. Nobody else could manage them without damaging their value," he said. "We have a relationship, we know the problems. We have no interest in delaying the sales."

Crédit Lyonnais is expected to report losses for 1994 of FFr12bn today, on top of FFr6.9bn last year. It is also set to unveil provisions of FFr18bn and goodwill write-offs of about FFr3.8bn.

Mr Peyrelevade said there had been no appreciable decline in business from existing customers as a result of the financial difficulties surrounding the bank over the past few months, but said the number of new customers opening accounts in the past year was down by about 20 per cent.

He rejected suggestions that many of the bank's past losses were the result of fraud, but added that in France, codes of conduct needed to be backed by law. He also stressed that the Commission Bancaire, which supervises French banks, might work more closely with bank auditors.

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THE LEX COLUMN

Curbing French bosses

A cynic might say Crédit Lyonnais's boss is only banging the drum for a better system of corporate governance in an attempt to defuse anger over the massive state bail-out of his bank. But that does not detract from the fact that French corporate governance needs a shake-up. Mr Jean Peyrelevade is surely right to argue that empire-building rather than fraud is the main cause of Crédit Lyonnais's plight. Moreover, the problem of over-mighty chairmen is not confined to Crédit Lyonnais.

Finding a solution, though, is not easy. Mr Peyrelevade wants new laws to weaken chairmen's powers. Splitting the roles of chairmen and chief executives, the current trend in the UK, or introducing German-style collegiality may look fine on paper. But such changes will make a big difference only if owners are in practice prepared to hold managers to account.

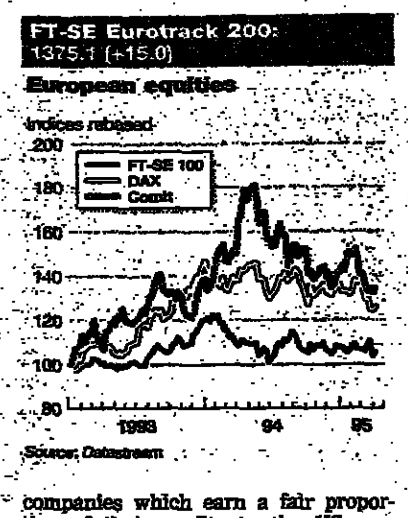
The snag is that few are willing to fulfil this role. Not only does France lack strong pension funds, many big French companies are bound together in a network of cross-shareholdings and cross-directorships. They are unlikely to take a hard line if they are engaged in the same empire-building as those in which they own shares.

Some hope that foreign investors, who own over a third of France's quoted shares, could act as a spur. But, if they do, it is more likely to be by selling shares than by taking an activist line. Companies may then realise that the way to cut their cost of capital is by introducing better checks and balances.

European equities

After months of thumb-twiddling, European equity markets suddenly came modestly alive yesterday. However the movement was not pronounced enough to suggest that the tide of sentiment has turned in Europe's favour after a lacklustre first quarter. Beset by nervousness over currencies, European markets fell by 2 per cent in the first quarter, with the DAX index of German shares down 8 per cent, Madrid and Milan down 6 per cent apiece and the UK's FT-SE 100 Index up 2.5 per cent.

The recuperation of the US dollar was the immediate cause of yesterday's rally. The evidence, however tentative, that the dollar has found a floor acts as a general tonic to investors' confidence. Moreover, if the dollar's recovery proves sustainable, it will be of direct benefit to European



companies which earn a fair proportion of their profits in the US currency. An additional positive factor is the abatement of currency tensions within Europe itself, following the Bundesbank's surprise decision to lower interest rates last week.

Any further calming of currency nervousness will make European equity markets look more attractive. The best value is probably to be found in the UK and France, where shares trade on a multiple of some 13 times expected earnings for next year. German shares still look pricy on 15 times expected earnings. Italian and Spanish markets look much cheaper – but the currency risks are still considerable. But even though valuations are far less stretched than a year ago, the markets are not screamingly cheap.

Barings/ING

ING should stop moaning about how long it is taking the Bank of England to complete its investigation into the Barings collapse. One can understand why ING wants the bank to come to a speedy conclusion. Once the bank has identified who was to blame for Barings' failure to control its trader, Mr Nick Leeson, ING's own job of deciding whom to fire would be simple.

But the bank's job is not to make it easy for ING to sack people. Its probe has a semi-judicial nature. Though it should be completed quickly, it would be foolish to rush out a report that was not entirely accurate. A more telling criticism of the bank's inquiry is that it is not fully independent.

ING should have fired, or at least suspended, those tainted with the debacle as soon as it bought Barings a month ago. By dithering, it has damaged the morale of the bulk of Barings' employees; it can hardly be motivating to have those responsible still in their midst. Customers are not happy either. They do not know whether the bankers they are dealing with now will still be at their desks in several months' time.

ING's shareholders must be wondering why the management has not taken swifter action. The sooner Barings has a new management structure, the better the chance that ING's investment will pay off. Fortunately, ING now seems to be gearing up to dismiss those it believes are to blame. That would be better than attempting to hide behind the Bank of England.

UK property

Notwithstanding yesterday's substantial leasing deal in Canary Wharf, the best of the cyclical recovery in UK commercial property prices may already be over. Property outperformed returns on both equities and gilts last year. But Richard Ellis's latest property index shows a 2.1 per cent fall in average capital values for the year to March, the first fall since August 1993. Of course, property shares have already underperformed the stock market by 11 per cent in the past year. But share prices still take for granted a recovery which looks increasingly uncertain.

The problem is that UK economic growth has been led by manufacturing, and has been driven by rising productivity. Retailers remain depressed, and elsewhere in the service sector the emphasis is on rationalisation and controlling costs, such as rent. There are pockets of recovery. But while rental increases are reappearing for quality modern office buildings, a surplus of ageing low quality space will continue to restrain the overall market.

Property shares are trading at an average discount to net asset value of around 16 per cent, compared with a 15 year average discount of 23 per cent. In addition, the shares offer a market average dividend yield, at a time when dividend growth will fall substantially short of other sectors. Pre-election tax giveaways would help erase the current atmosphere of corporate restraint, and provide some impetus for further rental growth. But the election remains some way hence.

See additional Lex comment on UK bus groups merger, Page 21

Software may bedevil computer security

Continued from Page 1

between computers from competing organisations or countries.

Satan's creators have refused industry pleas to limit distribution to professionals, or to charge a high enough price to discourage casual users.

Concern about Satan has prompted computer companies to check the vulnerability of their products. "We have run Satan internally and our systems are secure," said Mr Eric Shmidt, chief technical officer at Sun Microsystems, a leading supplier of computers used to store Internet databases. Sun has also urged its customers, to implement the latest updates to their software to improve security.

Companies selling computer security products and services are already seeing a surge in interest. "As awareness is heightened, the bosses react," said Mr David J Blumberg, a director of Checkpoint Software, an Israeli company that sells "firewalls" which protect computers from hackers. "The good guys are fighting back."

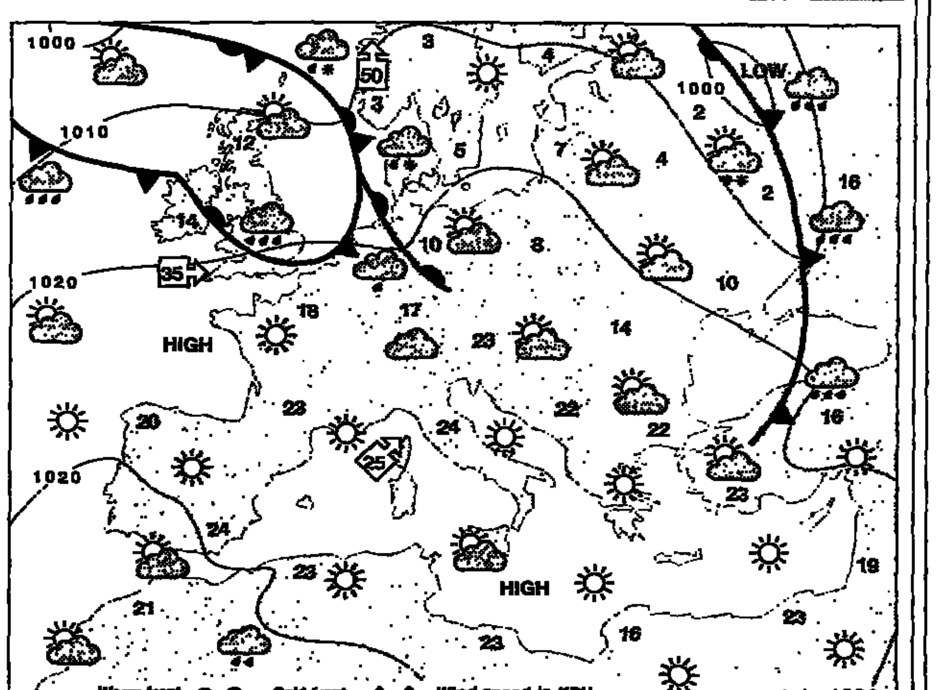
FT WEATHER GUIDE

Europe today

Much of Europe will be dry as low pressure and associated rain and frontal zones move north. The southern Benelux, western Germany and northern France will have sunny spells. The Alps and southern Germany will be cloudy but dry. Eastern Europe will have sunny periods but the Mediterranean area will have plenty of sun. High cloud will linger over Sicily and southern Spain but the sun will still be visible. Rain will affect northern Ireland and some drizzle is expected in the southern UK. Scotland will have sunny spells.

Five-day forecast

The northward shift of low pressure systems will continue, giving way to high pressure over the UK. The Benelux, the UK, Germany and France will be settled as a result. Temperatures over western Europe are expected to drop to seasonal values. The Mediterranean will remain sunny during the next couple of days, although developing low pressure will increase cloud over Spain during the weekend.



Situation at 12 GMT. Temperatures maximum for day. Forecasts by Meteo Consult of the Netherlands

TODAY'S TEMPERATURES

		Maximum Celsius
Abu Dhabi	sun	31
Accra	fair	33
Algiers	sun	23
Amsterdam	drzzl	14
Athens	sun	23
Atlanta	shower	17
B. Aires	fair	28
B.ham	cloudy	14
Bangkok	thund	36
Barcelona	sun	19
Beijing	fair	17
Belfast	rain	12
Belgrade	fair	22
Berlin	fair	11
Bermuda	shower	21
Bogota	shower	21
Bombay	sun	32
Brussels	fair	15
Budapest	cloudy	16
C.hagen	fair	6
Cairo	sun	23
Cape Town	sun	28
Caracas	cloudy	29
Cardiff	cloudy	13
Casablanca	fair	21
Chicago	cloudy	5
Cologne	fair	18
Dakar	fair	25
Dallas	thund	22
Delhi	sun	33
Dubai	sun	31
Dublin	drzzl	14
Dubrovnik	sun	22
Edinburgh	fair	12
Faro	fair	22
Frankfurt	fair	19
Geneva	sun	20
Gibraltar	fair	19
Glasgow	drzzl	12
Hamburg	drzzl	10
Helsinki	sun	4
Hong Kong	thund	24
Honolulu	fair	28
Istanbul	fair	18
Jakarta	shower	31
Jersey	cloudy	10
Karachi	sun	36
Kuwait	fair	28
L. Angeles	sun	23
Las Palmas	sun	23
Lima	fair	26
Lisbon	sun	25
London	cloudy	16
Lux.bourg	fair	17
Lyon	sun	21
Madeira	fair	20
Madrid	sun	24
Majorca	sun	22
Malta	fair	20
Manchester	rain	13
Manila	shower	32
Melbourne	shower	17
Mexico City	cloudy	22
Miami	fair	28
Milan	sun	23
Montreal	snow	-3
Moscow	shower	4
Munich	fair	17
Nairobi	fair	26
Naples	sun	20
Nassau	fair	29
New York	fair	3
Nice	sun	19
Nicosia	sun	17
Oslo	cloudy	6
Paris	fair	16
Perth	sun	27
Prague	cloudy	14
Rangoon	sun	35
Reykjavik	snow	4
Rio	shower	27
Rome	sun	19
S. Frsco	fair	17
Seoul	sun	17
Singapore	shower	32
Stockholm	sun	8
Strasbourg	fair	20
Sydney	fair	20
Tangier	fair	23
Tel Aviv	fair	21
Tokyo	sun	15
Toronto	snow	2
Vancouver	rain	12
Venice	sun	20
Vienna	cloudy	16
Warsaw	fair	8
Washington	fair	8
Wellington	fair	20
Winnipeg	fair	-1
Zurich	cloudy	19

FINANCIAL TIMES **REVIEW**

Information Technology

Wednesday April 5 1995

After the Barings collapse, what are the lessons to be learned? **Paul Taylor** finds worrying evidence of inadequate risk management in the financial world. Operational risks have increased, too, with the spread of new technology

Risk issues now a high priority

The dramatic collapse of Barings bank at the end of February has shown just how significant the limitations of bank risk management systems are, and at the same time raised questions about the adequacy of self-regulation in fast-moving derivatives markets.

It has also focused attention on banks' own internal checks and controls, and on the computer systems and software available to help them to manage exposure to risk.

In Barings case, risk management was already becoming an important issue. The bank had established an integrated group treasury and risk function to report to a daily meeting of a new assets and liability committee (Alco) which had been set up in August last year.

A communications architecture, *Boris* (*Barings Order Routing and Information System*), had also been introduced to improve the processing of information about deals, and the bank had been considering several risk management software packages, including OpenLimits, under development by ACT, now part of the Mysis group.

However, when Nick Leeson, the Singapore trader at the centre of the Barings collapse, went on his Nikkei futures contracts buying binge, in the wake of the Kobe earthquake, there was no specific market risk management product in place.

Consultants such as Dave Gilbert of Logica identify a handful of specific risks facing banks - market risk related to changes in market conditions, credit risk, liquidity risk, legal risk and operational or settlement risk due to any kind of operational failure, including those related to systems and staff - "the main issues for banks are operational, market and credit risk," he says.

Yet a survey published by Touche Ross just days after the Barings collapse, suggests worryingly that it is not just Barings which has yet to implement the systems needed to protect their businesses. The analysis of 100 financial institutions in the UK found evidence that the majority appear to have totally inadequate risk management systems. It found that:

■ Almost 60 per cent of firms admitted that their systems did not meet current risk requirements and 43 per cent said internal management reporting would require considerable investment in IT systems. A third of the respondents said that the European Union's capital adequacy directive, which comes into effect on January 1 next year, would require significant efforts to be made.

■ Although, in general, firms plan to increase their investment in risk management systems, a few are even seeking cutbacks in this area following recent falls in profit margins.

The findings are worrying, says Derek Ross, a partner in the firm - "more than half of the financial institutions who participated in the survey admit that their risk management systems do not meet requirements. A particular concern is that some firms are focusing on routine administrative reporting, rather than the critical core risk management systems."

The Touche Ross findings are supported by a wide-ranging study from the US-based Tower Group market research organisation which covered 20 banking groups in nine countries which was published at the end of October.

"Our study found that banks in the US have the most well-developed risk management systems in the world," says Deborah Williams of the Tower Group. Close behind the Americans are the British banks, followed by the Germans and Swiss. Internationale Nederlanden Group (ING), the Dutch bank which came to Barings' rescue is also one of those that had undertaken measures to protect itself. ING has installed Data Sciences' sophisticated Valuta-IDS front office integrated dealing system, which provides a manager with a consolidated view of credit and market risk in real time across a range of financial instruments - "it automates the complete process," says Albert Longvord of Data Sciences.

Few banks outside these countries have the formal processes in place to manage other than credit risk. "Despite the advances made by some banks, risk management practices at banks today - even the leaders - still need improvement," says Williams.

The report identifies *four main obstacles* to the implementation of risk management processes: organisational isolation; differing systems needs; absence of necessary risk data in current systems; and lack of available technology solutions.

Indeed, although increasing use of automation to process bank products can contribute to lowering many of the risks associated with banking, the large number of applications, operating systems and hardware platforms present a risk in itself. Operating risk, although not new, has thus increased dramatically with the growth of technology.

Systems proliferation has highlighted interconnection problems and incompatibilities. These have been exacerbated by the unequal development of back and front office systems.

Typically, front office systems and applications are the most modern - profit-generating derivative traders in particular have been able to commission state-of-the-art product development, market analysis and trading systems, often developed by software boutiques, to run on their PCs and powerful workstations.

In contrast, many cash-starved back office settlement systems are still using antiquated mainframe-based software installed before many of the latest derivatives products were even developed.

The problem facing banks is partly one of choice - "there is a myriad of applications out there, but there is a lack of consolidated information," says Keith Bear of IBM's European banking, finance and securities division, who sees a huge problem of data integration. The solution favoured by IBM is to build a data 'warehouse' which draws from the various applications and provides a common pool which can then be used by third party risk management software.

"Data access and integration is by far the most difficult and critical problem facing banks today," agrees Williams. "Data aggregation is a key area of competence in order to implement successful risk management systems."

This aggregation takes four forms: local single-product, local multi-product, global single product and global multi product. Williams says the practice seems to be to try to become global first and multi-product next on a product-by product basis, with high-priority, low-volume, complex products coming first.

The Tower group identifies five different kinds of risk management applications, (see charts, page 20), which are relevant. These include product processors with built in single product risk management functionality (one of the best-known products of this type is Sungard's Devon Derivatives System which integrates trading risk management and operational control of derivatives); management information systems applications which are used for risk management; integrated banking packages with risk management modules; third party risk-management specific packages; and in-house developed systems specific to risk management.

But despite this proliferation of products - many of which are profiled in IT consultant Bob Browning's list of Treasury Software available via the internet (*http://www.cityscape.co.uk/users/ck99*) - Williams argues that there is no single vendor package which address all five risk types.

For this reason, many banks have developed their own proprietary risk management packages, or do not have systems in place at all. Predictably, the leaders in terms of risk management systems tend to be the global banks with branch networks around the world. The risk management process at these banks is becoming highly automated with limits tending to be built into trade capture and processing systems. In most cases, limit allocation is automated.

These market leaders are investing heavily in proprietary risk systems, with the Tower Group report estimating an average spend of $10m a year each. Overall, Williams estimates that banks spent about $3bn last year on risk management with US and European banks accounting for nearly 80 per cent of the total.

Risk management is also one of the fastest-growing segments of bank IT spending. The Tower Group expects this spending to grow to $4.3bn by the end of the decade, with a rising proportion being spent on external vendors.

However, Williams warns: "Banks attempting to implement enterprise-wide risk management in a piecemeal fashion through a combination of internal and external product-based systems are not likely to be successful. The issue of risk management is one which needs to be addressed at a very high level of the bank, but also supported throughout the organisation by the bank's culture processes and technology."

In the case of Barings, whether the existence of a market risk management system would have made any difference in the end is doubtful. As Jean Hilder, a director of TMS Computer Authors, a London-based information development specialist notes, although controls are mostly brought into effect by IT systems, "the IT system is the mechanism only - the policy for controls must still be set and monitored, and the knowledge must be retained."

Although the failure at Barings has been blamed on deception by a single individual, "it is clear that the bank's own back office systems and management controls should have protected it against losses on this scale," says David Millar, associate director at Hoskyns, part of the CGS computer services group.

Comprehensive risk management systems, if implemented properly, can, nevertheless, substantially reduce the chances of a catastrophe similar to that at Barings happening as bank regulators on both side of the Atlantic have acknowledged in drawing up new bank capital adequacy rules.

● Risk Management Systems for Financial Institutions benchmark Survey, Touche Ross, tel +44 (0)171 936 3000.

● Bob Browning's Treasury Software Internet Web pages
http://www.cityscape.co.uk/users/ck99

● Enterprise Wide Risk management Technology: A Global Study, The Tower Group, (1) 617 253 5777

Key aspects of risk management
See Page 20

■ VIEW FROM THE TOP

A big change of company culture

Gerhard Schulmeyer tells Paul Taylor why he is optimistic about the future of Siemens Nixdorf Informations-systme. SNI was formed after Siemens rescued the rapidly failing, independently-owned Nixdorf Computer company in 1990

Gerhard Schulmeyer, president and chief executive of SNI since October last year, has good reason to smile.

Five years after Siemens acquired the troubled Nixdorf computer business and grafted it on to its own mainframe operations, SNI is starting to grow again.

SNI posted a 9 per cent rise in turnover and an 17 per cent increase in orders in the first five months of its financial year starting in October, Mr Schulmeyer, chairman, said at the CeBit fair in Hanover last month. In February orders, led by the revitalised personal computer operations, grew by 28 per cent. On this basis SNI, which made net losses of DM350m on turnover of DM11.7bn last year and raked up total net losses of almost Dm1.7bn in the years 1991-94, should break even this year if restructuring costs are excluded.

After two years of declining orders and sales, the renewed growth is welcome news for SNI's remaining 37,000 workers who have been through a period of painful restructuring which has seen the company shed close to a third of its workforce.

"The growth is getting steeper," said Mr Schulmeyer, "It is not just that we happened to have one lucky month. growth is now accelerating."

Although SNI is receiving some help from the recovering German economy, its growth is faster than the market in general.

Mr Schulmeyer, aged 55, took over from his predecessor, Hans-Dieter Wiedig, at the start of October after Heinrich von Pierer, Siemens's group chairman, broke with tradition to name an outsider to SNI's top post and set a deadline of 1996 for the business to reach break-even - and thus a position of relative strength from which it can negotiate on equal terms with potential partners.

When his appointment was announced in January last year, Mr Schulmeyer, formerly with Motorola and then a main board member running Asea Brown Boveri's operations in the Americas, said he believed his new job would be fun. He still maintains he is enjoying himself.

For Schulmeyer, who has dual German and American nationality, his SNI appointment marks a return to the industry he knows best: high-tech electronics. In the late 1970s he worked for Wega Radio, a Sony subsidiary, before moving to Motorola, where he worked between 1980 and 1989, latterly as executive vice president and deputy to the chief executive running Motorola Europe. He then moved to ABB, based in Stamford, Connecticut, where he presided over the integration of two important acquisitions, Combustion Engineering, and the transmission and distribution businesses of Westinghouse.

SNI began to implement a restructuring plan which involved grouping its activities around business and systems units as a means of responding more closely to the markets for computer systems and services. The company's product range was also streamlined and its distribution system reorganised.

The process, however, has been a painful one and is still not complete. Since his arrival at SNI, Mr Schulmeyer has been focusing on the difficult task of generating a new culture for the group. "SNI did not really have its own culture before," he explains. "It was partly Siemens, partly Nixdorf."

Siemens was still dreaming of its mainframe days and Nixdorf was stuck in its mid-range mentality. "We managers have to learn to take risks, otherwise nothing will happen," he has said.

There is a clear and pressing need to transform SNI into a more dynamic and entrepreneurial organisation able to compete in the fast-moving, market-driven world computer industry, but Mr Schulmeyer, who spent six month on the faculty at Massachusetts Institute of Technology teaching management, before taking up his SNI post, has chosen to be the catalyst for change, rather than present his own agenda from the top.

He has set a tight 12-month timetable to transform the company - "I knew that if I put it on a longer schedule nothing would happen. Changing a corporation's mentality usually takes three to five years, and we don't have it," he said.

"We cannot think in terms of two-year or five-year plans. We have to think of days . . . if you don't have a major technical feature change every six months, you start to look old. You must revamp your entire product range every 12 months or you begin to look out of step."

He says the repositioning of SNI is taking place on two levels, behavioural and structural. "As far as the behavioural aspect is concerned, we started with 30 people within the company and trained them very fast to be able to run a large conference of about 400 people. Then, these 400 people identified 19 areas which are critical to move in the right direction. These 19 areas were published throughout the company so that each and every employee had an opportunity to look into the subjects – out of these subjects our people developed 60 subject matters projects which are suitable for working on for a period of 90 days and very soon we will be staging an exhibition of these 60 subject matters, to which we will invite all Siemens Nixdorf employees. At the moment we have some 1,000 people seriously involved."

At the same time, he says an internal survey confirmed that one of the biggest problems within SNI was communications. As a result, a number of new initiatives have been introduced, including Friday Forums, where any employee can raise issues and management is expected to present a report card on where the company stands and invite those attending to participate in the planning process.

More responsibility and accountability has also been pushed down to those entrepreneurs who stand at the intersection of regions and businesses.

The role of managers, says Schulmeyer, is to act as coaches. Parallel to this, SNI's top management has been restructured. There are now 16 senior managers of whom eight have been recruited from outside. Among them is Dick Lussier, the former chief executive of Pyramid, who has been put in charge of the Americas.

SNI's recent acquisition of Pyramid, the massively parallel processing specialist, allows SNI to offer "the world's most complete binary compatible scaleable line of Unix computers." Mr Schulmeyer adds: "We acquired Pyramid partly because we wanted to have some of this Silicon valley entrepreneurial spirit in the company".

FINANCIAL TIMES **REVIEW**

Information Technology

About this second Review

Welcome to the second issue of the FT Review of Information Technology, our monthly guide to the latest trends and developments within one of the world's most important business sectors.
The review appears on the first Wednesday of each month with copies of the FINANCIAL TIMES (except August and January).

Since our first issue, the importance to business of information technology systems as a management tool has been highlighted by the problems at Barings, and in our introductory article this month we focus on some of the lessons which companies in the financial services sector can learn as a result.

In this issue we are also looking at the onward march of the personal computer and the power these machines linked through client/server networks can put on the executive's desktop. We also look at the growth of teleworking, at some of the equipment to back this development, and the issues it raises.

Future FT/IT reviews will continue to highlight areas of interest and concern to our business readers (see the back page of this Review for details of forthcoming issues). We are also looking forward to a continuing dialogue with our readers, many of whom have written with comments and suggestions about this new publication. Your ideas and points of view on issues we have already mentioned – or which you think need to be considered or discussed – are welcome.

We hope you will enjoy reading this latest FT Review of Information Technology and will find it useful and relevant to your business activities.

Rhys David, FT Surveys Editor

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The next issue of the monthly FT-IT Review will be published on Wednesday, May 3, 1995.

Main topics will include:
Advances in mobile computing.
Outsourcing and facilities management: a monthly update.
Systems for financial consolidation and integration.
Voice technology: new business applications.

For a more detailed synopsis, please see the announcement on the back page of this Review. Editorial background information for consideration for future issues can be sent to the Production Editor, IT Review, FT Surveys Department.

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IT focus

IT focus: the battle for the desktop. **Paul Taylor** introduces this section with an overview of developments in the personal computer market worldwide.

Personal computers - The price war hots up as suppliers fight for market share, reports Paul Taylor

More power on the desktop

Over the past decade, the personal computer has put real computing power on the desktop, transformed corporate data processing and become the driving force behind the reshaping of business operations in the 1990s

Less than 15 years after the first desktop personal computers were introduced, client/server networks are replacing the traditional mainframe machine for many business applications – even those mission critical applications. As a result, the market for powerful network servers has become one of the most dynamic.

Meanwhile, local area networks are being interconnected to form wide area networks spanning the whole of a company's operations. This trend has turned the manufacturers of interconnection equipment – such as routers and hubs – into some of the fastest-growing businesses in the industry.

By the end of this decade, nearly 70 per cent of companies are expected to have moved all their applications over to client/server systems. Thus the installed base of mainframes is falling by about 10 per cent a year despite dramatic recent reductions in the cost of mainframe computing power.

Nevertheless, the traditional mainframe – or rather its updated large system equivalent, powered in future by standard CMOS-based microprocessors – probably does still have a role to play in enterprise computing, particularly as a corporate information warehouse.

In the US, an estimated 64 per cent of PCs were connected to local area networks last year, up from 52 per cent a year earlier and by 1998 it is predicted that 85 per cent will be connected.

But this shift to PCs and networked PCs in particular, has cast a spotlight on the cost of ownership of PCs themselves as corporate buyers have become increasingly concerned about obtaining value for money from their spiraling IT spending.

Last year, more than 60 per cent of the $137bn spent on hardware was used to buy PCs compared with just a quarter of the $38bn spent on data processing in 1983.

By 1988, more than three-quarters of total IT investment is expected to be spent on the merging PCs and workstation market.

"We live in an age of client/server configurations, with PC and Unix workstations as the clients and PCs and other open systems as the servers," said Mr Horst Nasko, vice chairman of Siemens Nixdorf Information Systems' managing board.

"They offer the ideal prerequisites for optimum IT support through the introduction of networked holistic solutions. It has nevertheless been found – for many, a painful and expensive experience – that it is simply not enough to buy a few PCs off the rack, load shrink-wrapped software in to them, and then interconnect it all via local area networks (Lans) and public networks. The development of enterprise IT solutions very quickly takes on large dimensions in terms of organisational structure, technology and financial expense."

A recent report by the US-based Gartner market research group showed that on average, the five-year cost of networked PC ownership had risen from $19,000 in the mid-1980s to more than $40,000 today.

Only 20 per cent of the total cost associated with networked PCs is related to the initial purchase. The other 80 per cent includes the ongoing cost of ownership such as training, inventory tracking of hardware and software, software audits and updates, technical support, user downtime, data loss from system failure and so on.

As PC-based networks increasingly become the backbone of today's business environments, corporations are discovering that these networks are expensive and complicated to install, maintain and control, says Andreas Barth, Compaq's European senior vice president. Last month, Compaq, the market leader relaunched its Deskpro line with new features and intelligent manageability designed to cut the cost of ownership.

Compaq, which overtook IBM to become the world's biggest PC supplier last year, now faces a battle to retain the number one position in the face of fierce competition from IBM and other manufacturers determined to win out in the race to control the desktop – in the home as well as the office.

According to Dataquest, the market research organisation, the worldwide personal computer market grew by 20 per cent last year, driven by a surge in home personal computer retail sales, accelerating technological advances and fiercely competitive pricing.

The estimated 48m PCs sold in 1994 brought the total installed base of PCs to between 150m and 170m. With PC sales accounting for an ever-increasing proportion of corporate IT spending, no computer company can afford to ignore the dynamic PC segment. This is evident from a renewed determination by PC manufacturers, such as Digital and Hewlett Packard of the US and Siemens Nixdorf and ICL in Europe, to boost their PC market shares.

However, the strategies of the top ten PC manufacturers vary considerably. For example, companies such as Compaq and IBM are emphasising the breadth of their product ranges by building networking capabilities into their business machines while adding communications and multimedia facilities to machines aimed at the growing home PC segment.

Others, such as Digital – now one of the fastest-growing PC brands – have shifted distribution channels, switching from direct to indirect sales to boost market share, while Dell Computer has decided to focus on business-to-business direct sales. Meanwhile, Packard Bell has been very successfully exploiting the fast-growing retail end of the market.

The challenge for Compaq and the other leading PC manufacturers, is to stay ahead in a constantly shifting market characterised by rapid technological change, aggressive pricing driven by falling microprocessor chip prices and little, if any, customer loyalty.

These market conditions have played into the hands of the big brand name manufacturers, such as Compaq, whose resurgence – in competition with the cut-price clone manufacturers since the early 1990s – has become a benchmark for the industry.

Nevertheless, squeezed profit margins and shortening product cycles continue to take their toll on the smaller and weaker companies in the industry and the process of consolidation continues apace. According to IDC, the market research company, the top five PC manufacturers held 45 per cent of the total market in 1993 but are expected to account for around three quarters of all shipments by the end of the decade. Price competition has been the norm in the PC industry for many years, but the past 18 months has been a particularly turbulent period with all the leading PC manufacturers slashing prices repeatedly to keep volumes moving ahead.

Mr Mike Swalwell, managing director of Dell UK, predicts that increased price/performance across all product ranges, underpinned by the transition to faster processors beginning with the Pentium chip, will drive industry consolidation. The latest price cuts have been fuelled by sharp reductions the price of the micro-processors which power today's desktop PCs, particularly those made by Intel, the world's leading semiconductor manufacturer accounting for around an 80 per cent share of the world market.

Intel has been aggressively cutting the prices of both its older 486 microprocessors and its latest generation Pentium processors in order to head-off competition from AMD, Cyrix and the Power PC chip, jointly developed by Apple, IBM and Motorola, and to make way for its next generation P6 chip. As a recent report by McKinsey & Company into the state of the computer industry noted, the old computer industry structure dominated by

Continued on page 4

Innovation in document management

The personal computer user, above, is using XSoft's Visual recall system which allows multiple users to locate and access documents across local and wide area Novell networks. Users can also search for words or their derivatives using a 'stemming' facility – for example, a search for the word 'mouse' will also show documents containing the words 'mice' and 'mousing.' This facility also operates across multiple languages.

Visual Recall also offers a three-dimensional graphic user interface, allowing users to instantly view any retrieved document. XSoft is a division of Xerox.

Focus on document management: case studies among leading insurance companies, see page 8

■ **Networks and Network Servers** - Unlocking the productive capacity of IT investments - **by Tom Foremski in California**

Vital for business success

Networks are essential for delivering and capturing information within an organisation

The term personal computer is in many ways an anachronism in today's world where the focus is on networks of computers rather than isolated systems.

In the spirit of the poet John Donne, the computer is no longer considered an island. Whether it is linked to other computers via local area networks or by modems, the focus is on helping computer users work together and to manage a flow of ideas and knowledge within an organisation

Computer networks originally developed out of a need for finding an inexpensive way to help computer users share expensive peripherals such as laser printers and to share files without resorting to copying files on to a floppy disk and walking them over to a colleague.

From these beginnings, networks have emerged as the single most important key to unlocking the productive capacity of IT investments.

"The network is critical to an organisation's success," says Hugh Ryan, director for new age architecture at management consultants Andersen Consulting. "It represents the convergence of computers, knowledge and communications that helps organisations completely re-engineer their business to take advantage of changing markets."

Networks of computers now deliver electronic mail, multimedia training, and desktop video conferencing. They are essential for futuristic concepts such as delivering and capturing information and knowledge within an organisation – a concept that is rapidly becoming a central focus for the success of a business within a global market.

There are two main types of network: peer-to-peer and client/server. The first kind is the easiest to set up while the second kind is more complicated but far more powerful.

In a client/server network, computer users are connected to a central computer known as the network server. A network server can be a simple PC or it can be a more powerful system equipped with many microprocessors, massive hard drives and large system memory. Its sole job is to help manage store data and applications and manage the interactions between users as fast as it can.

In a peer-to-peer network, there is no central server and in essence, each computer on the network acts as both the client and the server. Peer-to-peer networks are easier to manage and inexpensive. Apple Computer for example, includes the AppleTalk peer-to-peer network in all of its Macintosh computers, allowing users to set up a network strung together with common phone wire.

Products such as Netware Lite from Novell, Lantastic from Artisoft, and Microsoft's Windows for Workgroups are popular peer-to-peer networks for IBM PC and compatible users.

On client-server networks, Novell's Netware operating system is the dominant client-server software. Products such as Netware, IBM's LAN Manager and Banyan Systems' Vines, allow organisations to network hundreds of PCs in a client-server architecture.

Network servers have to be fast, powerful machines capable of storing programs and files for many users and providing near instantaneous access. Companies such as IBM, Compaq Computer, AST Research, Sun Microsystems and Hewlett-Packard are leading suppliers of network servers.

Servers typically employ the latest and fastest microprocessors and the trend is to use them in parallel, in multiprocessor systems such as Compaq's ProLiant models.

Networks of computers now deliver electronic mail, multimedia training and desktop videoconferencing

CASE STUDY Project aims to link 48,000 staff via desktop PCs

US networks deliver multimedia training

The California-based telephone company Pacific Bell is using networks to deliver multimedia training to staff in a bid to standardise training materials and bring down training costs.

Known as the employee knowledge link, the goal is to make training and staff support data available to most of Pacific Bell's 48,000 staff from their desktop computers. The system will eventually replace Pacific Bell's training materials which are based on printed materials and videotapes.

Using the employee knowledge link, Pacific Bell intends to gain better control over its training materials, making sure that the most current versions are used without having to print new materials and update video tapes.

As a government regulated business, Pacific Bell staff must be made aware of new government regulations and changes in business practices. Monitoring staff to make sure they are using the right version of a training sessions is a substantial task which Pacific Bell believes can be better managed with a centralised network system.

Rapid learning

In addition to improved control, multimedia-based training also offers a richer educational environment with colour, sound, text and animation to help improve the quality of training sessions and enable staff to learn new skills more rapidly.

The employee knowledge link began with a pilot project using Sun Microsystems workstations linked to a Sun 690 MP Unix network server. ISDN-based telephone lines are used as the bridge between the server networks and the client workstations. GainMomentum from Gain Technology was used to create the multimedia-based training sessions. From this pilot project, the system has been expended from about eight client workstations to nearly 300 Pentium-based client systems located in common areas within Pacific Bell offices. The project has also dropped GainMomentum in favour of Authorware, a multimedia authoring system from Macromedia.

The project's ultimate goal is to be able to deliver multimedia-based training directly to each staff member's desktop system. This network will also be used to access reference materials, product and service information and a central knowledge database. Pacific Bell estimates that once completed, the system will net annual savings of about $3m.

Overcoming problems

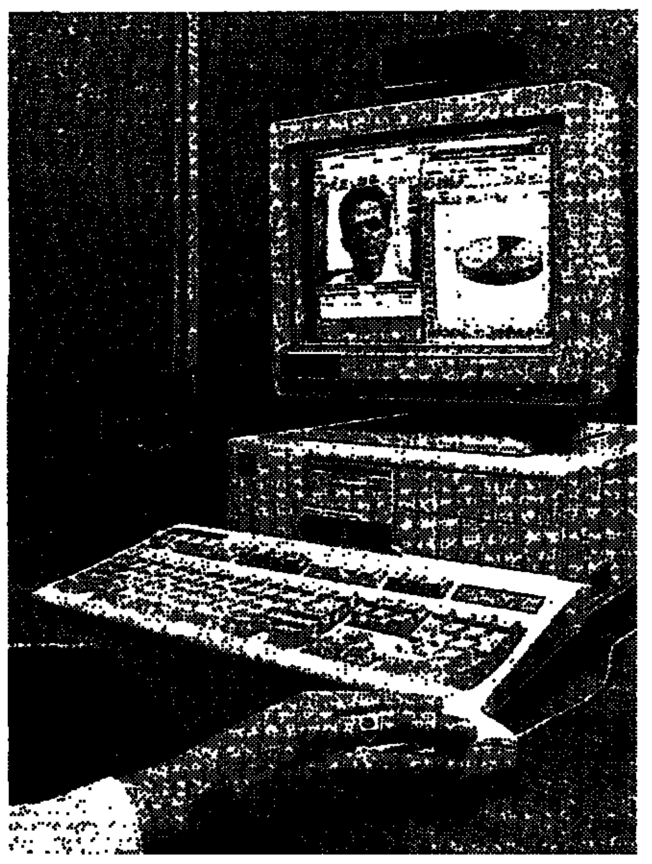
Mr Jack Fine, the project manager, says the company had considered publishing multimedia training sessions on CD-Roms but decided that keeping track of the distribution of CD-Rom disks would be a substantial task in itself.

Mr Fine admits that the project has run into problems – "we're learning a lot about how to use ISDN for delivering multimedia applications. We've overcome many problems and we feel that if we can do this over ISDN, we will be able to use virtually any type of network."

Although Pacific Bell could have used a higher capacity broadband network, as a provider of ISDN lines, it believes it is important to demonstrate to customers what can be achieved with ISDN networks.

"We've shown our training project to customers and they've been very impressed," he adds. "One university immediately saw the potential of providing courses over ISDN lines to virtually anywhere in the world."

A screen shot of Micromedia's multimedia authoring system



The introduction of videoconferencing with desktop PCs will have a significant impact on the working environment. Last year the worldwide multimedia PC market quadrupled to 10.3m machines within 12 months

■ **Large systems** - Advanced versions of 'big iron' number crunchers are gaining respect among users, reports **Louise Kehoe in California**

The pendulum swings back again

The mainframe could gain a fresh lease on life with new technology

Reports of the death of the mainframe computer have been greatly exaggerated, manufacturers insist. Yet the outlook for "big iron" remains uncertain despite a recent upturn in sales.

While IBM with 80 per cent of the world mainframe market, and Amdahl, the largest manufacturer of IBM-compatible mainframes, both reported stronger than expected mainframe sales for the past year, opinions differ widely over whether the improvement represents a bubble of pent-up demand that could quickly burst, or a true resurgence in the mainframe market.

What is clear, however, is that as corporate computer users assess the true costs and complexities of client/server computing in which personal computers and mid-range computers are distributed throughout an organisation and linked by networks, the mainframe is gaining new respect for its proven reliability and performance.

"The pendulum has swung back in favour of the mainframe," says Joseph Zemke, chief executive of Amdahl. Users are discovering that distributed computing and open systems are not the nirvana that many imagined them to be a few years ago, he suggests.

Not long ago it was "politically incorrect to buy a mainframe computer," he says. "Until recently, it was a career-threatening move for a chief information officer to recommend the purchase of a new mainframe. That is no longer true."

Now companies are choosing computer systems based on rational comparisons of the costs and benefits of either centralised or distributed data processing, whereas a few years ago – when the client/server trend was at its peak – there was a "triumph of rhetoric over logic," says Mr Zemke.

Several other factors have contributed to stronger than expected mainframe sales over the past year. Improved general economic conditions have released money for mainframe purchases that were deferred during recessionary periods.

There has also been a substantial reduction in mainframe prices over the past two years. Prices are now roughly half of 1993 levels. While this has significantly reduced computer manufacturers' mainframe profit margins, it has encouraged customers to reconsider shifting applications from mainframes to smaller computers.

Indeed, the mainframe market may be "bottoming out," says Bob Djurdjevic of Annex Research, a US market research group. Over the past five years sales of IBM-compatible mainframes have dropped from a peak of about $16bn in 1989 to about $8bn last year. This year he is projecting a slight increase in sales.

Annex estimates that the revenues of IBM's large scale computer division (which include mainframe hardware, software and peripherals) declined by four per cent last year to about $8.6bn. The drop was much smaller than in 1993, however, when revenues fell by 29 per cent. This year, revenues could pick up to about $9bn, says Mr Djurdjevic.

However, most Wall Street analysts take a less sanguine view. Computer manufacturers "should not be fooled by the resurgence in mainframe demand because open, microprocessor-based systems are the long-term answer," Morgan Stanley analysts said in a recent computer industry report.

Some market analysts also foresee a continuing decline in the use of mainframes. The US banking industry, which has long been a stronghold for IBM mainframes, will shift rapidly toward smaller midrange computers over the next five years, according to new study by Frost & Sullivan.

Spending on computers by US banks will drop from $4.6bn in 1993 to $3.6bn in the year 2000, the researchers say, and the mainframe share of spending will plunge from 53 per cent to 28 per cent, putting a serious dent in mainframe revenues.

Even IBM is projecting a 10-15 per cent decline in mainframe revenues this year as a result of continuing price cutting. This would represent a sharper fall than in 1994. However, mainframes are doing much better than IBM had predicted in early 1994 when Jerome York, IBM chief financial officer, said that he expected a 50 per cent decline in mainframe revenues for the year.

IBM's view is, in effect, a self fulfilling prophesy. Over the past two years the company has roughly halved its mainframe manufacturing capacity. While IBM has said that it is "sold out" of its traditional water-cooled mainframes through the first half of this year and newer CMOS air-cooled models are sold out through the first quarter, this does not mean that demand has picked up to historic levels.

None of the leading US computer manufacturers are counting on a comeback of the mainframe. IBM's strategic focus has switched to "network centric computing," client/server computing and services, as its primary sources of future revenue growth. Similarly, Amdahl has diversified into open systems computing products.

Neither company, however, is abandoning the mainframe. Both believe that updated technology could give the mainframe a new lease of life.

Already, IBM is bringing CMOS (complimentary metal oxide semiconductor) chips – the same technology used in desktop computers – to the mainframe computer world. At the same time, new types of 'parallel large scale computers are beginning to enter the commercial market sector.

The mainframe computer may change, but it will not die. Under the new name of enterprise server or simply large scale computer, it will continue to play an important role in information processing for many years to come.

Ancient number-cruncher: the famous Eniac machine, completed in 1946, with 18,000 valves – its name was an acronymn for 'electronic numeric integrator and calculator.' The Eniac was designed in the US during World War Two by John Atanasoff and John Mauchly to work on ballistic calculations, but the war ended before it could be used for that purpose, so it was was used for other scientific calculations

Challenge for suppliers

continued from page 3

integrated systems companies has largely been replaced by a highly fragmented chain of companies carrying out specialised tasks. The process of adjustment has been a particularly painful one for the old mainframe system vendors.

Whereas systems companies such as IBM and Digital captured 69 per cent of revenue and 75 per cent of profits in 1983, by 1993 the revenue stream was shared more broadly with a large number of companies, including semiconductor, systems software, applications software and communications hardware companies. As a result, the systems vendors share of overall revenue fell to 62 per cent and, even more crucially, their share of the industry's profits plummeted to 28 per cent.

The strategic challenge for companies in the computer industry has changed to a battle for economic surplus rather than simply revenue, says the McKinsey report.

"The ability to incorporate three aspects of strategic thinking – traditional product and service-based competition, targetting surplus concentration, and developing market specialisation – and to execute against all of them as appropriate, will highlight the difference between the winners and losers in the 1990s."

■ The world's top ten PC vendors

Rank 1994	Vendor	1994 unit shipments	% market share	% growth, 1994/93
1	Compaq	4,830,000	10	56
2	IBM	4,227,000	8.7	0
3	Apple	4,125,000	8.5	12
4	Packard Bell	2,285,000	4.7	103
5	NEC	1,706,000	3.5	12
6	AST	1,285,000	2.6	18
7	Dell	1,233,000	2.5	7
8	Toshiba	1,231,000	2.5	65
9	HP	1,221,000	2.5	84
10	Acer	1,190,000	2.5	63
-	Others	25,167,000	51.9	25
-	All vendors	48,500,000	-	27

Compaq, which overtook IBM to become the world's biggest PC supplier last year, now faces a battle to retain the number one position in the face of fierce competition from IBM and other manufacturers determined to win the race to control the desktop – in the home, as well as the office. The figures (above) from International Data Corporation indicate that Packard Bell was the fastest-growing PC company in 1994, with revenues forecasts for the year of more than $3bn. *Source: IDC*

■ **PC disk space** - There is increasing pressure on suppliers, reports **George Black**

Data storage: users are seldom satisfied

System designers are just managing to keep up with rising demand

Demand for storage is *booming, mainly* because newly popular graphical software applications take up much more space than older character-based programs.

Other reasons for this trend, according to market analysts at Frost & Sullivan, are the shift from 16-bit to 32-bit operating and networking systems, the generation of larger files and the increase in the number of programs used by individuals.

The arrival of Microsoft's Windows 95 operating system will push up the space needed to run a PC operating system from 60 to around 100 megabytes.

Users have learnt from experience that 'backing-up' data is vital, so they now keep two or even three copies of files where once they kept only one.

Mr Joe Jura, a senior analyst at Dataquest, says the convergence of computing and telecommunications is another important contributory factor – "the emergence of video-conferencing and other multimedia applications is greatly increasing demand," he says.

Mr Lou Lewis, north European vice-president of sales for the disk manufacturer, Seagate, says the sharp rise in disk sales in the past 18 months can be attributed largely to the fall in price.

Domestic users can now afford to buy multimedia PCs which need at least 400-500 megabyte hard disks (a megabyte is a million bytes of data) to be able to load portions of CD-Roms (compact disks with read only memory).

These pressures will ensure that in the next two or three years the average new personal computer will be able to store more than a gigabyte (a thousand million bytes) of data on hard disk.

Designers of storage devices are just managing to keep up with rising demand, though business users constantly complain to their systems managers that there is not enough disk space.

Advances in the density of storage have enabled disk manufacturers to improve the price/performance ratio at the same time as increasing capacity.

The newest 3.5 inch and 5.25 inch disks can hold four and nine gigabytes respectively. Meanwhile, a new technology called MR (magneto-resistive) heads is expected to improve densities further.

Hard disks look like remaining the favourite medium for at least a decade, offering best value for most purposes in both capacity and speed of access. Dataquest expects 50 per cent growth in the capacity of disks every year well into the next century.

Optical devices such as CD-Rom, rewritable and Worm (Write Once Read Many) disks have not made a significant dent in the hard disk market. They are not as fast to access as conventional disks. They are also more expensive, though more durable than tapes for back-up and archiving.

Meanwhile, demand for CD-Roms is rocketing, fuelled by the new multimedia PCs, but they are supplementing, not replacing hard disks.

The market in general is maintaining steady growth – eight per cent per year by value for hard disk, five per cent for tape drives and 20 per cent for optical devices in Europe up to 1997, according to market research from International Data Corporation, IDC.

Following a shake-out in this fiercely contested market in the past two years, there are now signs of more stability, but the battle for market share continues, with short product lifecycles as brief as nine months to a year.

Companies dominate different sectors. In the hard disk sector, Quantum and Seagate are big contestants; in tapes, Hewlett-Packard leads the field; in CD-Roms, Panasonic is strong; while in re-writable *media, Fujitsu is a pace-setter.* Yet none of these companies can regard their leading position as completely secure.

As data volumes rise, systems managers face a growing problem of how to access files most efficiently, so as to meet users' expectations of rapid response times. Those expectations must be met, because the unavailability of a system for even a few minutes can cost millions of pounds in lost business.

Hard disks are still fallible. One possible way of improving system reliability is 'Raid' (redundant arrays of inexpensive disks), where a file can be spread across a number of disks, accessed in parallel. But Raid is not yet widely understood in the industry and is generally seen as too expensive for all but top-end users.

Suppliers face the same challenge as computer manufacturers: the move from a proprietary environment to open systems, to meet the growing requirement of users to be able *to build multi-vendor networks.* Easy communication between storage devices from different sources is essential for this. Some of the latest products, such as Digital's StorageWorks, seek to satisfy this need.

Better organisation and management of information can greatly alleviate storage problems. Data compression programs such as Stac Electronics' Stacker can save a lot of space on disks.

Another approach, recommended by Mr Martin Sampayo, storage marketing manager for Digital, is to use software tools for hierarchical storage management. These systems automatically migrate data between expensive and less expensive media, based on the frequency of access.

صورة من الاصل

■ **Desktop videoconferencing** - Now far more than a 'picture telephone,' reports **Tom Foremski in California**

Smart way to cut travel costs

Future uses will go far beyond the business arena to educational and domestic applications

Desktop videoconferencing is set for a big expansion following a recent agreement on communications standards, greater availability of ISDN lines (integrated services digital networks) and the development of lower priced products.

Within the next few years, desktop videoconferencing could be as common as electronic mail, as PC makers introduce computers equipped with simple video cameras and as software becomes available for handling videoconferencing over existing networks.

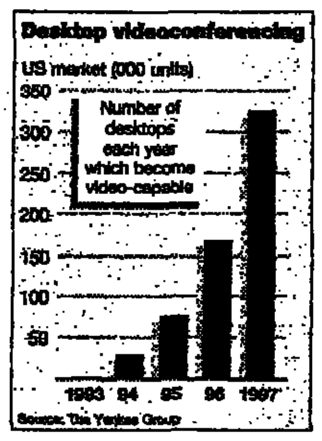
Desktop videoconferencing promises to be more than just a picture telephone. Several users can collaborate on the same document or spreadsheet, for example, while viewing each other in small video windows on the computer display. Once desktop videoconferencing technology is in place, it can be extended to provide other services. Users might be able to access remote cameras to check on traffic or weather conditions locally or across the world. Parents might be able to sneak a look at their kids in the classroom or check to see if they left the oven on at home.

So far, desktop videoconferencing has found relatively few users because of high costs and proprietary products which limit usefulness. Intel's ProShare system, for example, can cost about $2,000 per user in terms of additional hardware and will only work with other systems that support Intel's videoconferencing technology.

Fortunately, Intel and other members of the Personal Conference Working Group recently agreed to support a common communications standard known as H.320. This will allow desktop videoconferencing systems from different companies to communicate with each other.

Another trend is to dispense with specialised hardware and instead rely on software and the computer's processing power to handle videoconferencing. Intel has demonstrated a software version of ProShare which will be available by the end of this year. However, in order for the software-only version of ProShare to work, PCs will need to adopt a technology Intel calls Native Signal Processing (NSP).

NSP transfers the functions that add-on boards perform, such as communications and



video and audio processing, to the main microprocessor. Intel says that as microprocessors become more powerful, such as its Pentium microprocessor, they will be able to handle more tasks.

"With NSP, we will make use of the extra processor cycles that the Pentium provides," said Intel CEO Andrew Grove when he announced NSP late last year. "Pentium systems are rarely used at their peak performance. With NSP we will be able to offer customers extra functionality."

Apple Computer has also taken the software approach with its recently announced QuickTime Videoconferencing (QTC) product. Apple does not need NSP since its Macintosh systems are already designed to handle video and audio processing tasks.

"We see a tremendous number of applications for this technology," said Rick LeFaivre, vice president of Apple's Advanced Technology Group. "While the first users are mostly business users, there are exciting applications for educational uses and for home use."

At the Intermedia trade show held earlier this year in San Francisco, Apple demonstrated QTC operating across different hardware platforms, including conferencing to a broader set of users. ISDN allows telephone lines to transmit ten times as much data as a standard 14.4 kilobits per second modem.

Demand for desktop videoconferencing should also act as an incentive for telephone companies to provide ISDN lines to larger numbers of telephone customers and to reduce the price of those lines. California-based Pacific Bell, for example, is offering ISDN connections for homes for as little as $20 per month.

In the US, many companies are obliged to comply with the Environmental Protection Agency's (EPA) Clean Air Act which requires them to reduce car use by employees. The combination of desktop videoconferencing and ISDN lines is one way they can meet Clean Air Act requirements while enabling staff to work part of the time from home and still participate in meetings with colleagues.

Desktop videoconferencing will also result in new types of applications. Andersen Consulting has demonstrated an intelligent agent technology that allows a user to manage recorded video messages through voice commands and a touch screen interface.

Andersen believes desktop videoconferencing will become increasingly important in cutting down travel costs associated with meetings and in meeting future regulations.

"What will happen if the EPA decides that jet travel causes too much pollution and laws are passed to limit jet travel?" asks Hugh Ryan, director for new age architecture at Andersen Consulting.

Other companies offering desktop videoconferencing products include Alpha Systems Lab with MegaConference, InVision from InVision Systems, AT&T's Vistium Personal Video System, Teleview from Video Conferencing Communications, and LiveLAN from PictureTel.

Bank's videoconference network: see IT Update, page 17

Managers staying in touch: this personal visual communications system from PictureTel enables executives in widely dispersed organisations to communicate 'live' with full-colour and full-motion video meetings. The PCS 100 system with high-resolution video, runs on a relatively economic integrated services digital network (ISDN). The growing demand for desktop videoconferencing is likely to act as an incentive for telephone companies to provide more – and cheaper – ISDN lines

One-to-one video conferencing

The new 'Focus PC' system allows businesses to quickly conduct one-to-one videoconferences from any workstation within their organisation, using integrated services digital network (ISDN) connectivity.

The system offers users the benefits of multimedia-working at a relatively low cost compared with many alternative videoconferencing solutions. Users simply insert a single card into a PC clot and thus turn their PC into a fully integrated voice, data and full-resolution videoconferencing system. Pre-recorded videos can be transmitted between systems, while files conrtaining text and graphics can be transferred at high speed to colleagues in advances of a meeting. The package, from GPT Communications, is priced at £3,995.

■ **Multimedia** - Research intensifies, reports **Michael Wiltshire**

Market quadruples within a year

Multimedia PCs hold big promise for business applications

Despite much hype and premature forecasts, multimedia's ability to bring together full-motion video, sound, animation, still images and text on a personal computer or workstation will eventually make it the most common form of computing, analysts now predict.

Training, presentation, point-of-sale and reference databases all benefit from the speed and interaction of the computer, comments Frost & Sullivan, the market research company. These functions also benefit from the power and effective communication inherent in sound, moving video and animation.

While the introduction of personal videoconferencing via desktop PCs will eventually have a significant impact on the working environment, there is intense debate on how multimedia will be introduced in the home. Some observers believe that the television set will be the vehicle to deliver these services, while others see the TV set as a relatively unsophisticated device, believing instead that the home PC will be the answer. Meanwhile, research is being stepped up in the race to find what the market calls 'killer' applications in commercial and consumer areas.

It is clear, however, that as the multimedia market grows, it will begin to merge with telecommunications on one side and television on the other.

The world market for multimedia PCs quadrupled last year, with sales reaching 10.3m machines – up from 2.5m in 1993 – which represents a growth rate of 312 per cent, according to researchers at Dataquest in San Jose, California. Apple Computer led the way with 2.4m multimedia machines, but was outpaced in the US by Packard Bell which won 24.3 per cent of the US market, compared to Apple's 20.5 per cent. While sales of multimedia PCs rose rapidly in the home market, they have generally lagged in the business sector, with the exception of specialised applications in the areas of video production, presentation and training, says Bruce Ryon, director of Dataquest's multimedia market research service.

Among European business users, the average 'spend' on multimedia per site is estimated at under £80,000, but a large proportion of potential users have yet to be convinced of the need to acquire multimedia technologies, even at a low-cost CD-Rom level, comment researchers at Input.

☐ European Multimedia Markets, Frost & Sullivan, London, tel +44(71) 730 3438.
☐ Dataquest Multimedia Report, US, tel (408) 437-8312.
☐ Input report, UK tel +44(0) 1753 530 444.

Debate on multimedia training applications: see page 17

■ Combined products – Developments in all-in-one printing, copying and faxing – report by Jola Shillingford

Make way for the multi-function machine

Why buy a separate printer, fax and copier when you can buy a machine which combines all three?

Multi-function machines sound like a great idea, but the first products were not a success.

Valerie Smith, an analyst at Dataquest, says there are a number of reasons why. Early machines like the Oki Docit – a combined printer, copier and fax – were expensive. And the manufacturers had problems creating a new market for them.

Will the latest generation of products succeed where their predecessors failed? Smith believes that low-end multi-function devices will sell well in the home market and to executive secretaries because prices are getting more realistic and will fall further. Low-end machines are also convenient because they save space on the desktop.

Marketing is still an issue, however. People usually go out to buy a single-function machine, but may buy an extra feature if it doesn't cost much more.

Yet the capabilities of multi-function machines are not always equivalent to those offered on single function machines. For example, the copying features on a low-end fax-printer-copier can be limited. The important thing is to make sure that the requirements for your first (and maybe second) choice function are met.

There is a growing choice of products designed to plug into a personal computer. Panasonic sells a low-end printer-fax machine for around £900. Hewlett Packard's OfficeJet fax-printer-copier costs $1,000 in the US and will be launched in the UK this autumn.

Rank Xerox will introduce a combined printer-fax-copier later this month based on ink-jet printing technology. Other suppliers in the market (or soon to be) include Toshiba, Ricoh, Konica, Canon and Minolta – "copier companies are leading the way in this market," says Smith.

It is also possible to buy devices which make an existing machine multi-functional. For example, Japanese companies NEC and Fujitsu, and the printer company Lexmark sell devices which turn a printer into plain-paper fax machine. Faxes are received into the PC, then printed out.

At Fuji-Xerox in Japan it is possible to buy modular multi-function machines. Purchasers start with, say, a copier and can add fax and printing at a later stage.

At the top end of the market for multi-functional machines is Xerox's DocuTech, a digital copier-cum-printer, designed for large companies or dedicated print shops. It can take input directly from a computer or disk which means that one print job can be set up while another is running.

Smith says: "Top-of-the range machines like the DocuTech which offer productivity benefits will do well, but mid-range multi-function machines for PC networks will be more difficult to sell. Users will worry about what is going to happen if they want to print out a document, while someone else is doing a copying job."

Fernando Pozo, general manager office document products at Rank Xerox (UK), says: "Early software for multi-function machines did not handle the issue of concurrent use very well. But the software used in Xerox's document server (a combined digital copier, printer and fax machine for networks) makes prioritising different jobs easy."

Pozo says the machine (essentially a mini-DocuTech) will cost less than buying a separate printer, fax and copier for the network and will enable documents to be put together from a variety of sources. For example, paper documents can be scanned into the machine and combined with text created on a PC. It will also be possible to produce a complete document – from creation to copying, collation and stapling – without leaving the PC.

Yet despite advances in multi-function machines, there will always be a place for the high-speed, specialised print facility, plotter or scanner. The market for high-speed printers (75 pages a minute or more) is dominated by Siemens Nixdorf Information Systems (SNI), IBM and Xerox.

The machines are getting faster. Last autumn SNI introduced a printer 26 per cent faster than previous models with a speed of 440 A4 pages a minute. This costs £220,000 and is aimed at companies, such as banks, building societies and insurance companies, with large mailing requirements.

Innovations at this end of the market include: improvements in print quality (this has gone up from 240 dots-per-inch to 300 dpi and will eventually move to 600); the ability to control print jobs from a PC or PC network, rather than from a mainframe; and the introduction of colour.

For example, British Gas is using Siemens Nixdorf printers in conjunction with colour units. The units allow the gas company to add colour to a run of bills (e.g. red for reminders), saving it from having to get bills pre-printed.

Below 75-pages a minute, a combination of better network management (for printers connected to PC networks) and colour are important. Hewlett Packard is the market leader but a large number of other suppliers also cater for this market. Many plan to introduce multi-function machines in the hope of shifting the balance of power.

"In the desktop printing market, there are three key trends," says Richard Hanscott, Hewlett Packard's personal printer brand manager: "Falling prices, improving print quality for both laser and inkjet-based machines, and the growing use of colour."

An entry-level laser printer once cost around £1,000, but today a four-page a minute Hewlett Packard laser printer with a resolution of 300 dpi costs around £400 (excluding VAT).

Laser printers are now available with a print quality of 600 dpi and inkjet technology is catching up. "You can get laser-like quality with the more expensive inkjet machines," says Hanscott.

Inkjet printers are cheaper to buy but the cost of each copy is higher. This means they are better for light users, whereas laser printers are best for intensive users. Another difference between the two technologies is that laser printing is permanent whereas inkjet printing will fade a little over time.

Perhaps the biggest advantage of inkjet printing is that it is easy to add colour. For an extra £35, any HP Deskjet inkjet printer can be turned into a colour printer. By contrast a colour laser can cost over £5,000. Hanscott says: "In unit terms, the inkjet market is growing in a healthy fashion. The laser printer market has slowed down – apart from the colour laser market which is exploding."

It remains to be seen what impact multi-function machines will have on printer sales. But there will soon to be plenty to choose from. "The market is going to be flooded," says Pozo.

Pictured above is one of the range of multi-functional fax models from Toshiba Information Systems – the new TF 505 plain paper fax/printer for smaller offices.

Printing benefits: The Law Society, serving 60,000 solicitors in England and Wales, has achieved significant cost-savings with its multi-functional DocuTech publishing system, from Rank Xerox

■ Portable computing – by Tom Foremski

New advances with docking stations

Worldwide, more than 7.4m portable computers were sold last year

Portable computers are the fastest-growing segment of the PC market as companies discover the benefits of having a more mobile workforce and as computer technologies improve to match the power of desktop systems.

Today's portable computers have come a long way from the 20lb to 30lb (9kg-13kg) monsters that once defined this category. Computers such as the Osborne 1 were the size of a small suitcase and were generally referred to by their users as "luggable," rather than portable. These early computers needed to be plugged into a local power outlet and had tiny screens.

Notebook computers now come with colour screens, battery power, large hard disk drives, internal modems and use powerful microprocessors such as Intel's Pentium.

With many companies now specifying that their staff have just one computer, people are choosing a portable computer as their main system. This is usually in conjunction with a docking station which allows the portable computer to also act as a desktop system.

Wireless data communications technologies ranging from wireless local area networks to cellular phone-based data communications, are also helping making portable computers the first choice for many professions. Accountants use them whenvisiting clients; insurance adjustors can process claims more quickly; doctors can access patient records at the bedside; sales people use portable computers to show multimedia presentations to potential customers; and police officers in the US use portable computers to fill out crime reports quickly.

The drive toward telecommuting *(see 'Directions' section on teleworking, pages 18 and 19)* is also resulting in increases indemand for portable computers. As more companies experiment with telecommuting, buying staff a portable computer that can be used at home as well as at work, becomes a cost effective move.

According to International Data Corporation, the market research group, more than 7.4m portable PCs were sold in 1994. The market is expected to grow by 18 per cent annually to reach a market size of 14.2m units by 1988.

Portable computers have become a broad category that includes notebook computers typically weighing about 7 lbs(3kg); sub-notebook computers weighing about 4 lbs(1.8kg) or less and with slightly smaller keyboards; and personal digital assistant type devices which do not come with a keyboard and use a stylus to enter data.

While being worthy competitors to desktop computers, portable computers suffer from a number of weaknesses and drawbacks. Price is a key issue. A notebook computer has a price about a third higher and a performance a third lower than a similarly equipped desktop system.

Weight is another factor. Notebook computer manufacturers have managed to decrease the weight of their products over the past few years through the use of lighter liquid crystal displays and greater use of custom chips which replace large amounts of circuitry. But rechargeable batteries are heavy and there has been little progress in developing lighter batteries while still providing reasonable portable power.

Many portable computers are still limited to about a four to six-hour battery life which requires users to carry replacement batteries if longer operating times are needed. The trend is towards 'smart batteries' with a specification developed by Intel and Duracell which equips batteries with their own chip that monitors power usage, and special software to make battery use more efficient.

Portable computer manufacturers are also moving toward more exotic batteries such as lithium ion which offers more power for the same weight as the more familiar nickel hydride and nickel cadmium batteries.

Japanese scientists recently reported the development of a new type of battery, based on the plastic polymers – dimercaptan and polyaniline – which could produce lighter batteries with longer life.

The use of PCMCIA cards (PCMCIA stands for personal computer memory card international association) is another key trend in portable computers. These are credit card-sized cards which simply plug into a portable computer to deliver a wide variety of functions ranging from a modem/fax capability to local area network adapters and solid-state hard drives. These PC cards add the functions of desktop computers without adding much to the weight of the portable computer.

To compete better with desktop systems, PC manufacturers offer docking stations. These are small modules that offer extra functions ranging from simple ports for networks and larger monitors, to bigger units containing larger hard drives and CD-Rom drives.

Apple Computer's Duo Dock is the most sophisticated of the docking stations, pulling in a portable Duo, rather like a video tape in a VCR. Other docking stations require the user to press the portable computer into the module.

One problem is that most notebook computers only work with docking stations from the same manufacturer. However, IBM and Toshiba docking stations will accept notebook computers from different manufacturers. Microsoft's Plug and Play computer architecture promises universal docking stations, later this year.

Power boost for portables: PC cards, the size of a credit card, add the functionality of a desktop computer to portable machines without adding much to the weight. These functions include modem/fax facilities

Portable PCs: management issues, see pages 10 and 11.

■ Groupware – Computer networks offer fresh business opportunities, reports Philip Manchester

Co-operative working now an irresistible trend

Computers and communications provide a key for people to work together more effectively

If information technology (IT) is the chicken, then applications are eggs. Although usually referred to as 'problems,' applications provide the energy which fuels innovation. New ideas are 'hatched,' grow to maturity and spawn a new generation of 'problems.'

But computers and communications – the brace of technologies which make up the IT sector – create their own agenda. Not only do they make it possible to carry out existing tasks in a different way, they also create new possibilities in the workplace.

The tedium of typing helped to creat the wordprocessor. But it also stimulated the development of 'graphical user interfaces.' Spreadsheet programs made it easier to understand complex arrays of numbers – and also led to the development of special 'maths' chips which could be used for 3D graphics. The most recent innovations in IT combine desktop computers with digital telecoms to improve communications – both inside a business and beyond it.

This advance will change work patterns – at least as radically as the motor car has over the last half century. It provides the foundation for teleworking, it can bring businesses and individuals together in an electronic marketplace and it opens the way to new co-operative ways of working that were impossible previously.

The effects are already evident – with increased use of electronic mail (email) systems for business communications and the emergence of software which supports co-operative working.

Groupware products like Lotus Notes, ICL's TeamWare and Novell's Groupwise build on email to help dispersed teams work together.

Groupware sits in the middle of a continuum of software that falls under the heading of computer-supported co-operative work. (CSCW).

CSCW embraces software technologies such as electronic mail and 'groupware,' the design technology of client/server networks and the theories of business process re-engineering and workflow automation. It is not a 'product' in the traditional sense – but a way of thinking about how technology and people can work together more effectively.

All this is not a new idea. Douglas Engelbart, the US researcher who is attributed with the invention of windows-based interfaces and mouse pointers, began work on CSCW systems in 1963 at the Stanford Research Institute and continues to promote the concept.

His pioneering On-line System (NLS) allowed team workers to collaborate by using a networked computer system. NLS evolved into the Augment system and provided the model for CoLab system developed at Xerox's Palo Alto Research Center (PARC) in the 1980s.

Since then, technology advances – such as powerful PCs, high-speed networks and intuitive user interfaces – have created an infrastructure for CSCW. Groupware is the first commercial fruit of the CSCW approach and is expected to grow rapidly in the next few years. UK market researcher Ovum predicts, for example, a worldwide market of $5.5bn for groupware products by 1998.

Workflow processing – as embodied in products like Staffware and Wang's Open Workflow package attempt to take groupware a step further. They include high-level business models and policies which can filter down to the operational activities of employees.

Such applications are only possible because information technology makes them so.

They will, in turn, put more innovative pressure on the computer and communications industries. Videoconferencing, multimedia and voice/speech processing could be the next batch of technologies to benefit. They will make co-operative working over computer networks irresistible.

CASE STUDY New approaches to management - By Philip Manchester

'All change' in tomorrow's workplace

The next generation of managers will face an entirely different workplace to their predecessors

Today's computer and communications technologies have created an electronic workplace where control, administration and accounting take place behind the glass screen of the computer.

They have also altered work patterns and made possible new ways of working. This radical change in the workplace demands new approaches to management.

The Henley Management College in Oxfordshire, UK, recognised the need for new managers to embrace information technology as long ago as 1988. Faced with the problem of administering its distance learning MBA programme for 6,000-7,000 students spread around the world, it introduced personal computers and modems (harware interfaces between computers and telephone lines).

Initially, the system provided electronic mail and informal electronic discussion groups to support remote students.

"We have found from running the distance learning programme since 1984 that students feel isolated. We were looking for ways to overcome feelings of loneliness," explains Ms Maureen George, director of the general management programme at Henley College.

An electronic 'campus' promised to help. "We looked at forms of computer conferencing and tried several systems. We came round to Lotus Notes because it seemed to offer what we wanted," she says.

In February 1994, the college offered Lotus Notes support to students for the first time. New recruits to the MBA course were offered the opportunity to use Notes as a part of their course.

Although the college provides a free copy of the software – together with a specially-written guide to using Notes – students must provide their own hardware and modem. The college has educational discount arrangements which can help students to buy their own hardware. The groupware helps students in many ways – "we have more than 100 databases on the system relating to many topics. There are mentoring databases for personal support and issues-based databases for topical discussion," says Ms George.

The college has also set up what it calls an electronic coffee shop where students can 'meet' in a less formal way to discuss their courses and related topics.

"It's a bit like the cybercafe on the Internet. We also have plans to link into the Internet eventually," says Ms George.

Students can use Lotus Notes to find course materials and the college is working on a pilot system for submitting assignments for electronic marking by tutors.

The Notes software is also used for administration. Students can book places on residential workshops and obtain faculty information from Notes databases.

Ms George says that about 1,000 of the MBA students are now using Notes and she expects this to grow quickly: "It is not mandatory because some of our students are in places where the level of telecommunications might not be available yet.

"We keep statistics of how the system is being used and it is very encouraging. Students start their own discussion groups on case studies and the like."

The college emphasises teamworking and the Lotus Notes software complements this, she explains – "it alters the pattern of our work and we hope it makes us more effective. But it certainly has had a very beneficial effect on the whole attitude of students."

The spin-off, of course, is that tomorrow's managers are coming to grips with the technology at first hand. This will help them adapt to the workplace of the 21st century.

■ Operating systems software

Tug of war on the desktop

Philip Manchester explains why users are taking a new interest in operating systems

The recent European ad campaign for IBM's OS/2 Warp software showed nuns and peasants discussing the virtues of multi-tasking and Internet connections. While this might seem implausible, it highlights the mystery of operating systems – the software under the covers of a desktop computer.

Operating systems software such as IBM's OS/2 and Microsoft's Windows ought to be the exclusive concern of technologists. It deals with the complexities of controlling display screens, the storage of data on disk and managing memory resources.

But the operating system is also the platform for all application software – from word processors to stock control systems – and it provides the links to other systems on a network. This puts the choice of an operating system on the desktop high on the agenda of any user. It is crucial to making their applications work properly.

This is especially true in networked systems. Desktop computers are no longer isolated. In many businesses they have become the window on to the corporate network. The result is that the software which goes to make up an application can be spread across several computers.

This adds a new dimension to the battle between operating systems suppliers which has raged for nearly a decade.

The US software company Microsoft has dominated this battle – firstly with its MS/Dos operating system and, more recently, with successive versions of its Windows software.

According to Ovum, the market research group, there were 15m copies of MS/Dos and 19m copies of Windows installed on desktop computers in Europe by the end of 1993. This compares to only 1.2m copies of IBM's OS/2 and 3.3m Apple Macintosh systems. Ovum forecasts over 46m copies of Windows, 7.7m for Macintosh and about 10m copies of OS/2 and its successors by 1998.

These figures suggest that the battle for the desktop will intensify. It will, however, take on a different complexion. The issue will be less about what happens on the desktop and more about how it links to other resources in corporate networks and beyond. Both Microsoft and IBM now place emphasis on how their systems connect to the Internet – the first manifestation of the information 'super highway.'

In reality, the leading contenders in the battle for the desktop look increasingly similar in most areas.

"System comparisons based on function are not valuable any more. Windows and OS/2 provide similar features," says Mr Chris Maycock, UK general manager for mid-range systems at the German computer builder, Siemens Nixdorf.

"A lot of the decisions about what can go on the desktop are influenced by so-called legacy systems and how much money the customer is prepared to spend. Most customers do not have that much freedom to choose," he says.

Mr Maycock sees two different types of desktop environment emerging in business: one that concentrates on the tools that users need locally and one that is tied closely to the corporate system.

"The isolated desktop is simple enough and is governed by what tools and applications are available. If you compare Windows, which has lots of applications available for it – and Unix – which has very few, you can see what happens. Unix is nowhere," he says.

Ovum's research supports this. It shows that Unix, an operating system usually associated with open systems, had sold only about 850,000 desktop copies in Europe by 1993, rising to 1.2m in 1998.

When the desktop is tied into business applications through a network, Mr Maycock says the choice of operating system is influenced by other factors.

"It will be influenced by what database is being used and what the application is. It is also going to be influenced by how 'scaleable' and reliable the operating system software is," he adds.

Siemens Nixdorf says it is backing Microsoft Windows because it is 'scaleable.' Microsoft has extended its range by introducing Windows NT, a version geared to the demands of client/server computing. This means that customers can use the same operating system on the desktop as they use for their background server computers. "We can see a way forward by combining Windows NT and the hardware we sell. But in the end we have to supply what the customer wants."

He notes that many large companies have decided to follow the Microsoft route.

"You would not expect to see major decisions from large organisations like this unless they were pretty sure."

Despite Microsoft's continued success, however, there is still support for IBM's rival OS/2 – especially in companies that have IBM mainframes in place.

"While it is not at the top, it is certainly present in corporates," observes Mr John Baradell, European business manager for US manufacturer, Unisys. "But Microsoft is in a better position with independent systems vendors. It has some good technologists and it has the name."

He acknowledges that early experiences of Windows NT have revealed "some inadequacies." But he is confident that Microsoft will put these right – "a lot of early users of Windows NT have had to put work in to bring it up to scratch. But it takes time for operating systems to become stable. Microsoft has put a lot of things right and has spent a lot of money on systems management."

Despite Microsoft's perceived dominance, however, the battle for the desktop is far from over.

Microsoft will also have to deliver its products more promptly. Windows 95 is running behind schedule – to the extent that some in the industry have suggested it will have to change the name to something else.

Windows 96, perhaps?

■ **Document management** - There are pitfalls: simple projects can get out of hand - **report by Michael Dempsey**

New world of 'workflow'

This mysterious term can lead to seductive but elusive ideologies in business

In a sector that is peppered with obscure terminology, the IT industry occasionally throws up a truly memorable and useful phrase.

Mark Payne, an executive consultant at accountants KPMG, specialises in document management technology and the obscure world of workflow. He finds that his clients are being plagued by the spectre of 'Project Scope Creep,' (PSC).

This alarming term refers to the tendency of simple projects to get out of hand. Attempts to eliminate paperwork via document imaging and associated technologies appear particularly vulnerable to an attack of PSC – *"people start off* thinking about simple electronic document management," says *Mark Payne. "Then they think* that instead of sending electronic images in a simple serial fashion, they'll opt for a more sophisticated parallel distribution."

This excess of ambition in technology is often encouraged by seductive but elusive ideologies. Workflow is a term popularised by salesmen of information technology, keen to sell document management systems. It refers to the automation of a set of tasks so as to speed up those tasks using IT.

In reality, this frequently degenerates into confused worship of a management cult with several definitions.

No two consultants in the field ever give exactly the same account of what workflow *is*, or what it should achieve. Payne notes that non-

Mark Payne: he welcomes 'workflow', but warns that over-ambitious attempts to eliminate paperwork with IT can end in confusion

technical staff often see workflow as nothing more than the simple routing of documents.

How can PSC be avoided? Payne recommends being "very realistic in the first planning objectives."

He endorses the technology behind document management, but as is often the case with IT, this technology was released on to the market before it was fully mature.

"Document management is a very beneficial product that is only now beginning to touch the sides of its potential."

General Accident, *the third* largest general and life insurance company in the UK has successfully used document management technology to spruce up its GA Direct telephone insurance operation.

GA claims to have saved £450,000 a year by processing all incoming documents using optical scanners and an associated computer network.

At its Bishopbriggs head office in Glasgow, GA Direct company receives 2,000 items of mail a day. All 65 claims handlers now work with a powerful desktop PC linked to double-page document scanners that record the images of every day's incoming mail before storing the material on computer discs or large optical discs.

The *latter resemble* long-playing records and are held in a storage system that operates on the same principle as a juke box. As paper is scanned in a workflow process commences, with software noting the time, date and identity of every staff member who deals with it – *thus*, a customer can call in and be directed straight to the last person they were dealing with.

The £1.5m system was installed by AT&T and GA says that the time taken to process claims has been reduced by more than 30 per cent. GA Direct avoided the perils of PSC by running a six-month pilot project at a separate claims office before awarding the full contract to AT&T.

CASE STUDY How a company replaced 650,000 paper files - by Michael Wiltshire

Key data for underwriters – at the touch of a button

In a highly competitive market, speedy access to data is crucial for NCM Credit Insurance, the UK arm of the Amsterdam-based NCM Group which handles more than £60bn worth of insurance transactions a year.

The Cardiff-based company has 115 underwriters and support staff using the data to evaluate credit risks around the clock. Last year, the company offered protection for £16bn of UK exports from 6,000 companies.

NCM insures short-term credit agreements between UK suppliers and buyers in more than 200 countries. At one stage, it had more than 230,000 mainly paper-based applications for insurance cover each year, explains Mike Long, director of information systems at NCM.

Today, with a new *document management* system, underwriters can rapidly call up computerised *information by clicking on to* on-screen icons.

In the early 1990s, it was a different story: if paper *documents were misfiled or* needed by several staff at the same time, delays could result. Then, three years ago, NCM began a large-scale re-assessment of business processes in a bid to sort 650,000 paper files and replace them with an automated system.

In partnership with IMI Computing, NCM introduced a comprehensive workflow system and upgraded its IBM mainframe-based underwriting system.

Colin Foxall, managing director of NCM Credit Insurance, left with Richard Needham, Trade Minister, at NCM's Cardiff office

Using a FileNet WorkFlo product, tailored to NCM's needs, paper files were scanned into the system. At the same time, underwriters were trained on Zenith PC workstations, connected via NCM's local area network to an image server and NCM's host computer system.

Image information is stored on the host system on optical disk and transferred on-demand to magnetic disk for rapid access by export underwriters. A two-way communication channel is now fully operational: underwriters can retrieve folders of images from the host underwriting system within seconds, via their personal computer 'in-baskets.'

IMI's workflow installation is already showing valuable benefits, says Mike Long – *"customer-response is* speedier and entire business processes are more effective."

CASE STUDY A successful French insurance application

Adieu, at last, to paper mountains

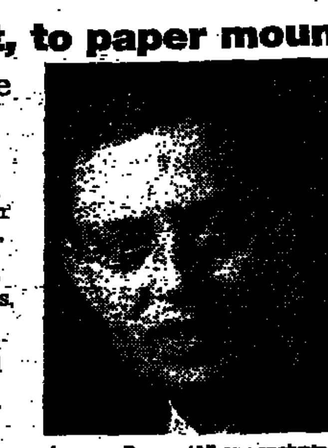
Productivity in the office is increased by 20 per cent

Coface is the leading French company for insuring foreign trade. It has 1,200 employees, 13 agencies worldwide and assets of $400m. It insures 25 per cent of all French exports, assessing risks involved, *writes Michael Dempsey.*

Coface began using optical scanners to feed paper documents into its computer system back in 1968. At the time, it relied on equipment from Wang, the office systems giant that fell on hard times in the late 1980s, filing for bankruptcy protection under US Chapter Eleven provisions in 1992.

Both Wang and Coface have enjoyed a renaissance of late, with the computer systems house returning to profit while Coface embarked on an expansion programme.

Coface already had Wang scanners feeding documents to its teams of credit risk assessors. Now it wanted to abolish paper as far as possible while integrating the scanners into a wider network of computers from several suppliers. The aim was to provide 300 users across the globe with a identical system on the desktop, regardless of the range of hardware and



Jacques Dupuy: 'All our analysts have access to the same data'

software behind the user interface. Jacques Dupuy, information systems manager at Coface's Paris head office, explains that the extent of vital commercial information was becoming a burden: "We need a lot of information from sources, such as Dun & Bradstreet and credit agencies."

Before the latest company-wide system was implemented, Coface risk assessors were obliged to check through mountains of paper files. This consumed time as well as storage space.

With the advent of open systems the computer industry has accepted that users demand easy compatibility between products from different manufacturers. Royce Murphy, *Wang's European* vice president for workflow and image software, admits that a failure *to embrace open* systems drove Wang to the wall.

Today, *his company* concentrates on software rather than hardware, and *Wang integrates scanning* components for a Coface network that embraces Compaq PCs, *jukeboxes of* optical discs and hardware from Hewlett-Packard.

Coface claims that productivity is up by 20 per cent while the time it takes to respond to a *request for* risk insurance has been cut from several days to 24 hours. More importantly, *the company* says it could handle double its previous business without *any significant increase in* staff.

The success of shifting all incoming paper information on to one coherent network cost £1m. But it has prompted a *wider strategy review, and* now Coface plans to move all information systems into a common 'architecture.' The point of delivery for all data will still be desktop PCs, but the *Coface Workstation, as it* is called, will feature access to imaging software connected through the network to document scanners.

■ **Desktop systems integration** - Efficiency in network management - **by Michael Dempsey**

Keeping costs under control

Clever software 'agents' quickly pin-point system problems and help reduce levels of support staff

Ted Burden is house-hunting in Paris. As a senior executive with IBM, the *computer manufacturer*, Mr Burden has just been promoted to lead its network station *management (NSM) operations* in Europe, the Middle East and Africa.

IBM has just launched NSM as an international desktop services organisation. Mr Burden will move from the company's UK head office in Portsmouth to manage a support structure that reaches out to 100,000 users across its geographic region.

The rise of desktop computing has, in his view, created a specific set of problems that threaten the profitability in many organisations. "The integration of technology may have become more simple, but rolling out and installing a sys*tem across* multiple sites creates another challenge," he says.

"If you don't keep control over proliferation of applications, then cost issues will become an important issue."

Echoing the frustrations of many information systems managers Mr Burden says that "a big pressure in desktop systems integration is to get some discipline into the environment."

Mr Burden's task has been helped by the advent of the software 'agent.' This is a *small computer program that* can be installed in any remote device, such as a printer or a *fax machine. The agent is* primed to broadcast an alert if the device malfunctions. In theory, an IBM engineer in Portsmouth can tell in an instant that a printer in Stuttgart is running out of toner.

Software agents are officially known as simple network management protocols (SNMPs). IBM's own SNMP range is Netview, but the software agent is only effective because of open systems, the practice of designing communications bridges between equipment and software from different suppliers.

However impressive its technology, Network Station Management would have limited appeal *to customers* if it only offered network management for IBM products. However, Mr *Neil Duncan, UK distributed* systems manager for NSM, is at pains to stress that he tests remote management techniques using software and systems from IBM's commercial rivals.

Ted Burden of IBM: his task in integration has been helped by the advent of the software 'agent'

"When a customer comes down to see what we can do, he wants a demonstration that will prove our ability to control Apple Macs, not IBM PCs. With the acceptance of truly open standards, we can control networks running Sun, Hewlett-Packard or Olivetti boxes. We have to do that, because *very few of our customers* operate just one type of system," says Mr Duncan.

IBM itself has benefited dramatically from cost-conscious network management. The bill for running IBM's internal desktop environment in the UK has been cut from £9.5m in 1993 to £6.7m in 1994 and to a projected £5.4m for 1995, a 43 per cent reduction over three years.

"We pushed up the productivity *of our people*," *says Mr* Burden. "With software agents providing remote diagnostics, *you don't need so many sup*port staff to cover the territory."

While Mr Burden retrained engineers to take on wider responsibilities, his colleagues clamped down on the cost of replacement parts.

Users would frequently complain that a mouse device was not functioning correctly. In reality, the mouse needed reprogramming to account for the users' level of pressure. But replacing the mouse with a new example was the easy and wasteful option. As software agents took some simple tasks off support staff, they became free to learn new skills.

"We trained them to set the mouse up to suit the individual user," he says.

Out *of such a simple* expedient, huge savings are born.

CASE STUDY System integration

Substantial savings on an international network

Targets have been achieved on BP Chemicals' European system

BP Chemicals is a £3.3bn turnover company with 14,000 employees that manufactures plastics and chemicals on a worldwide basis. During the early 1990s the company followed the technological vogue of moving away from huge centralised computer resources and installing a series of interconnected local area networks (lans), using desktop PCs as the prime IT engine, *writes Michael Dempsey.*

Often described as distributed processing, this was "very much a BP project," in the words of Mr Mike Keen, BP Chemicals integrated network services manager for Europe.

By 1993, Mr Keen's division was responsible for 400 users, spread across 14 European locations – "the sites were mixed, in terms of size and applications, and we had a small central support team that spent a lot of time trotting around Europe," he says.

The network had acquired local flavours, with national divisions picking their own favourite programs. This hardly made for easy support, and BP Chemicals began to look at the potential for contracting out the work.

The goal was to save £2m a year in operational costs, and *IBM was contracted to* support users locally while managing the system centrally. Software 'agents' played their part in permitting remote management.

Mr Keen is impressed with the ability of this technology to allow a desktop application to be monitored over great distances. He observed that users were initially concerned about exchanging a technician who worked down the corridor for a third-party support organisation.

But his latest user survey reveals more than 80 per cent satisfaction with the revised arrangement. BP Chemicals uses standard office software from suppliers such as Microsoft. This choice owes a lot to user preference, although Mr Keen has a shrewd idea of the motive – "Microsoft uses advertising tactically, targetting the end-users and relying on them to pressurise the IT department."

Whatever the product, some standardisation is crucial to cost-reduction. Calling in IBM as a desktop systems integrator has exceeded the £2m annual savings target. The contract stipulates a price per user of around £1,800 a year for support, the running of a helpdesk and local area network management.

At less than £800,000, it is a very practical solution. Keen stresses that BP Chemicals *asserted its rights as a* customer, retaining strict control over the direction of *corporate IT* – "we set the strategy and IBM undertookthe delivery."

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■ **PC management** - An increasingly important issue for accountants and IT staff - **by John Kavanagh**

'Horror stories' can be costly

Julian Bond, technical director: seventy per cent of personal computers in business are now linked to networks and the figure is rising fast

Evolving patterns of PC usage make asset management a complex task

When a maverick end-user installs his own go-faster circuit card and puts the department network out of action, it is time for tighter management.

This real-life example was discovered by research firm Butlerbloor among what it calls "horror stories" of lack of discipline in end-user departments.

These stories include the spread of illegally copied games, non-standard hardware and programs, and infestations of computer viruses.

Various studies show that the problem lies in a combination of the rapid growth of personal computers, (this expansion is outstripping the recruitment and training of support specialists), and increasingly aware users, who have growing expectations - and think they know more than they do.

Technology can itself provide help in the form of systems which manage assets and control what end-users do with their personal computers.

IT services group Hoskyns, which recently surveyed users of support services, feels that "asset management will increasingly become an issue for companies once the initial rush to roll out personal computers slows down and organisations are left wondering what is installed - and where."

Julian Bond, technical director of Workgroup Systems, finds this happening already. He and a partner found a dearth of such software while working in PC support, so they set up a company in 1989 and developed their own package. They now have 600 customers in the UK and 1,500 worldwide.

"As you put in the first 100 PCs, you can keep it all in your head," Mr Bond says. "As you grow to 200 - and then 300 - you write a little database program, but you soon need a proper system."

Evolving patterns of PC-use and ownership make asset management especially complicated, says Mr Bond - "these days a person might have a PC on his desk, a portable lap-top machine and perhaps another at home. In addition, each desk-top PC has individual parts: a keyboard, screen and processor box."

One reason for keeping this level of detail is that maintenance generally involves simply swapping a faulty unit for a good one.

The data permutations are further increased by the fact that over 70 per cent of PCs are now linked to a network - and this will increase to 90 per cent or more in the next 18 months, according to various studies.

Organisations must therefore keep track of which personal computers are connected to which networks and peripherals, such as shared printers.

IT people are not the only ones with an interest in equipment inventories - "in these days of cost centres, accountants want to keep track of assets, depreciation and spending against budgets," says Julian Bond.

Software is also an asset, and one which brings its own problems. Almost half the software products in use are illegal copies, according to the Software Publishers' Association.

Asset management and checking programs, backed by strict procedures and regular audits, plus disciplinary measures, can help. This is a big issue: companies in the UK face unlimited fines, while individuals, including directors, can receive two years in prison.

Julian Bond at Workgroup Systems sums up the need for asset management quite simply: "The trouble is, personal computers are just too easy to play with."

Keeping track of systems: computer staff at work in California at Computer Sciences Corporation (CSC), one the world's largest independent computer services companies. CSC is much involved in systems integration for US government departments, plus credit-related information services

■ **Mobile desktops**

New flexibility in working practices

Portable PCs are changing the way businesses are managed, reports **Clive Couldwell**

Portable computers used to be regarded as novelty items for senior executives - or as expensive presentation aids for companies eager to distinguish their salespeople from the competition.

Management consultants also latched on to the value of owning a portable computer early on. Now, the practical necessity of a mobile desktop is already well-established.

One could liken data within a company to 'water' which needs to be directed at the right user at the right time. Facilities such as graphical user interfaces (which make software programs easier to use), downsizing (the replacement of large computers by cheaper, smaller, equally powerful ones) and PC networks (which tie large numbers of small computers together, so they can exchange information with each other), have also revolutionised portable computing by setting up channels which direct that 'water' to the right user.

Equipping staff with portable computers has become increasingly important as working practices have become more flexible to match the changing nature of business. Companies have spent large sums creating enterprise-wide applications which can match the needs of sales professionals on the road, telecommuters with offices at home, and executive travellers checking in for information updates as they clock up their Air Miles.

The popularity of groupware, especially demand for applications based on Lotus Notes, and the increasing use of electronic mail, has transformed the way business is conducted, *(see networking report, page four).*

These days, managers are already computer-literate and use their own portable computers from their desk as well as the road. In more and more instances, these machines are already linked together by local area networks, so data can be drawn from different sources to build up the most appropriate picture for a specific customer or application.

In some instances, portable applications can also drive the way the management structure is organised, distributing the decision-making process and empowering those who are serving the customer, or producing the goods.

There are, of course, other difficulties associated with portable management. One of the biggest is cost, especially in the larger company, with some technology purchasers claiming the suppliers are charging what the market will bear.

Apart from the retail cost of each machine, new versions of software devour further resources, forcing users to buy more powerful machines to accommodate the additional functions.

"This really annoys me," comments Patrick Whale, the senior IT partner at KPMG Management Consulting. "We're effectively subsidising the inefficiency of these software producers."

Upgrading in the volumes required by most large companies magnifies the problem. So do the security issues associated with portable PCs. Theft and accidental damage have become so common that some large companies cannot easily obtain insurance and have to fund losses out of their own pocket.

Although small organisations and individuals can usually secure insurance, a company with thousands of mobile users on the move has to explore other options which spread the financial risk.

Some companies have gone for joint purchase schemes where staff are asked to pay for half the cost of the computer. The company retains ownership for the full depreciation period of the machine, say two years, at the end of which, ownership is transferred.

"Staff are very receptive to this idea and increasingly, it's becoming more of an issue," says Whale. "Certainly, if they are using a machine they are soon to own, there is more incentive for them to prevent its being stolen or broken."

The next issue of the FT's IT Review on Wednesday, May 3 will focus strongly on mobile computing applications. For details, see the advance synopsis on the back page of this issue of the Review.

Portables - no longer a novelty: equipping staff with portable PCs has ceome essential in many areas of business

مكرر من الاصل

■ Help desks – There is a growing demand for more user support as technology mushrooms, reports John Kavanagh

Fire-fighting is not enough

Most IT directors face considerable pressure from computer users

When Rene Carayol joined Pizza Hut UK as systems development manager two years ago, he found the cost of supporting the networked PCs at head office was actually higher than the system development costs.

"We were just fire-fighting, when what we needed was fire prevention," he says. "If you have inappropriate support you cannot move forward: being good at developing systems is just not enough."

The problem is to put in place the appropriate support. Research group Gartner says one IT specialist to 35 or 40 end-users is the industry norm. At a time when the user base is increasing fast, shortages in support staff can therefore develop. IT services group Hoskyns, in a recent study, found that "IT staff were being left behind in developing the necessary skills needed to support the mushrooming end-user technology."

As a result, Hoskyns says, "the vast majority of IT directors felt under considerable pressure from users to perform what they felt were impossible feats of support."

A common outcome identified by several studies is that users take the law into their own hands, setting up their own support teams or trying to sort out their own problems. This means the IT department, and therefore the company, risks losing control of what goes on in user departments; it also raises hidden costs as people are diverted from their jobs to do PC support.

This is acknowledged to be a fast-growing problem. Two competing solutions have emerged in the 1990s.

The first lies in a growing number of software packages which support help-desk teams. These provide information about users and their equipment and usually include a database which enables help-desk staff to collate details of problems, as they occur, and how to fix them.

The significance of this last feature is underlined by David Stamm, chief executive of help-desk software supplier, Clarify: "We see major companies with 15-20 departmental help-desks or with desks for different areas, such as electronic mail, networking and so on. But the distinctions are blurring, especially as companies move to distributed client/server computing.

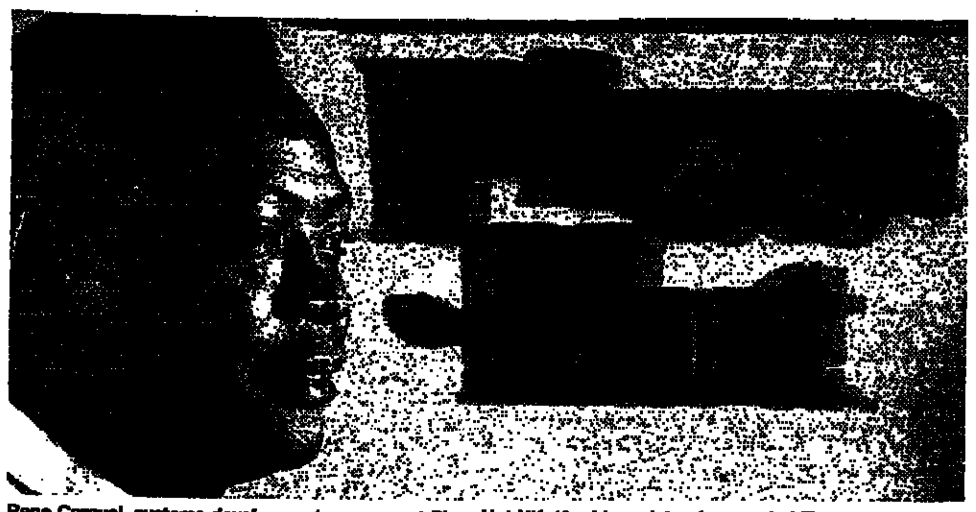
"At the same time, companies are sensitive to increases in manpower. So these systems enable companies to consolidate their skills in a single help-desk."

In some cases, end-users can access the database themselves to solve their own problems. Clarify also aims to persuade product suppliers to provide their own diagnostics data so that answers can come from the horse's mouth.

However, services companies, too, see support as a new opportunity. Rene Carayol at Pizza Hut, for example, now relies on Olivetti not only to monitor the PC network to anticipate any problems and keep it running but also to man the help-desk. He points to skills shortages and uses the established facilities management argument, that specialist contractors do a better job.

As Mr Carayol puts it: "Technology is now too complex and developing too fast for in-house support operations to develop the variety of skills required to support their own systems."

Companies certainly need to sort this issue out, for the growth of end-user computing looks set to continue at an unrelenting pace.



Rene Carayol, systems development manager at Pizza Hut UK: 'A wide variety of support skills are needed today as technology becomes increasingly complex'

Training: managers take a more positive view – page 17

■ Outsourcing - more companies seek management of desktop systems

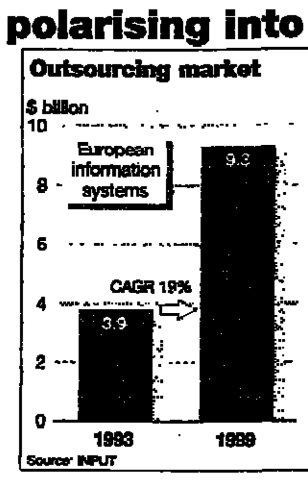
The market is polarising into two groups

As companies seek to reduce costs, 're-engineer' their businesses and integrate IT, the market for outsourcing of information systems is growing rapidly, *writes Michael Wiltshire.*

Outsourcing can be defined as a fixed-term contract – sometimes as long as ten years – in which companies transfer the ownership and/or management responsibility of their information systems to an outside supplier, for a fee.

The market is dominated by large international and national companies, followed by equipment suppliers. Electronic Data Systems, EDS, owned by General Motors, is the world's leading systems integrator and facilities management company. It is the largest outsourcing supplier in Europe and the US, where its main strength is with generally large mainframe computer systems.

Among users of outsourced services, many larger businesses – which have already outsourced their mainframe data centres – now seek facilities management to run their distributed computing systems and desktop environments. Leading sectors targetted by service providers are banking and finance, manufacturing, retail and distribution industries, governments and utilities.



In Europe, the UK has the most developed outsourcing market with 35 per cent of the European market, followed by France (24 per cent) and Germany (10 per cent), according to the Input research group.

Other fast-growing markets for outsourcing in Europe include Spain and Italy. Strong areas of demand are application operations and desktop services, valued at \$2.3bn in Europe last year. They are forecast to rise to \$6bn by 1999, when the total market will be worth an estimated \$9.3bn.

Overall, the market is polarising into two groups. One large group of relatively small service vendors is competing mainly on price and trying to add value for the customer through industry focus, comments Roger Fulton at Dataquest, the research group.

However, the other smaller group of very large outsourcing companies – such as EDS and IBM – has succeeded in establishing more co-operative business partnerships, in which both sides share risks and rewards.

"They are also leading to some blurring of boundaries between operations/facilities management and systems development projects," says Mr Fulton.

A critical factor for success in the outsourcing industry is the blending of technology management and service management skills, suggests Frost & Sullivan, the research group. Achieving cost competitiveness and investing in support technologies is also important, as well as specialising in particular industries or service areas.

■ Portable computing – by Clive Couldwell

Managers need an integrated approach

Ten pointers on how to win more business benefits with portable PCs

As portable PCs become more sophisticated and prices come down, they are not only becoming a common sight but also a potential hazard. Their effective management is paramount, so here are a few pointers for users:

□ First, almost any type of company can use portables to improve the way its business operates and deliver a better service to its customers. But the process must be business-driven to work efficiently, and the IT department has to be responsive to the requirements of the business by properly project-managing new software development and delivering applications quickly.

"It's paramount that companies integrate mobile computing into their corporate IT strategy and not treat it as a discrete function, or ignore it at a strategic level," says David Clarke, managing director of Rothwell Systems, a systems integrator whose annual *Corporate Computing Survey* (conducted by Internal Data Corporation) has examined mobile computing strategy.

□ He also recommends that users do not wait for the next technological development to come along before they invest in portable technology. Users are always learning and hardware will have a short 'shelf-life,' no matter what stage companiesdecide to adopt it.

□ Furthermore, do not think of mobile computing as just laptop machines: personal digital assistants (PDAs – hand-held devices which work with a pen, rather than a keyboard) may be adequate for many low-end, data capture applications. For example, engineering and warehousing).

The speed at which data is delivered into a central system is usually given high priority over the sophistication of the technology. A relatively simple data capture device can quickly transmit market-sensitive information back to base.

□ New versions of software gobble up more resources, forcing companies to buy more powerful machines to accommodate the functionality. It is wise to carefully choose the software which acts as your standard portable package and do not be bullied into an upgrade unless you know you cannot do without the additional functionality.

□ Although the price of portables is dropping all the time, buyers still pay a premium. Some machines are almost twice the price of their desk-bound equivalent. Be prepared to battle for a good deal with the supplier and do not be afraid to explore a variety of funding options – for example, asking staff to pay up half the cost of their machines.

Companies which rely increasingly on portables for their business also have a responsibility to make their staff aware of the risks involved with taking valuable corporate information out of a secure office environment.

□ Virus infection also affects portable staff and can seriously endanger a customer's business. It is easy to infect someone else's computer system and if you are not careful, you can be facing a suit for damages unless you install effective safeguards.

"The most effective portable computers will have transparent access to corporate networks," says Clarke. "Unless security is addressed, a stray laptop is as good as a pass key to a corporation's most valuable asset: its data."

Therefore, implement physical safeguards: secure access to applications on the portable and to the corporate network using passwords and other communications features.

Although many companies invest big sums of money in virus protection software, the most effective weapon companies can use to fight 'infection' is awareness. They should issue firm guidelines which clearly explain what staff can and cannot do on their machine, and what will happen to them if they do not comply.

Duplication and incompatibility of essential data is another. A number of sophisticated products on the market, such as Windows for Workgroups and Lotus Notes tackle this at the technical level by controlling the updating process to make sure that everyone is speaking one version of the truth. A controlled software environent will lay down guidelines for approved software use, so that everyone in the company is working on the same version of a named spreadsheet, word processor, or database.

Portables are not as reliable as desktop machines. They are switched on and off more often and get bashed around. Companies should insure against accidental loss and theft if they can, but be prepared for the cold shoulder. Premiums can be high and companies can be exposed without any cover.

Again, this is where a joint purchase scheme would encourage employees to take better care of their machines, knowing that after a certain time, they could own them. In any event, most portables are guaranteed for a year, sometimes three.

□ And do not forget training. This may include the use of portable technology and a new way of working away from the office with portables.

"Teleworking isn't a smooth transition for many people," says Clarke. "Unless staff are properly trained, they may experience difficulty adjusting to a working life not wholly associated with an office."

Companies should therefore plan how training can be administered to a distributed workforce. Should it be computer-based, running on the portable? Do workers need to return to head office for training courses? Adopting this option may put them out of circulation – can you, as a manager, afford to do that?

□ The ups and downs of teleworking: see pages 18 and 19.
□ Mobile computing: see details of next issue of the FT-IT Review, page 20

■ **Asia and the Pacific** - A turning point for PC suppliers, as US producers achieve stronger sales in Japan – Report by **Michiyo Nakamoto in Tokyo**

Big surge in Japan's PC market

Most companies now realise that there is no other choice but to equip their office workers with PCs

Markets for personal *computers* in Asia and the Pacific have taken off strongly in the past few years, spurred by economic growth in many parts of the region and, in the case of Japan, increased demand due to significantly lower prices.

As many Asian economies *charged ahead on a high*-growth track, PC shipments rose nearly 38 per cent for the Asia-Pacific region to 7.9m units, according to researchers at the International Data Corporation, IDC. Growth took place despite a slow economic recovery in Japan and under-developed distribution channels and lack of infrastructure in countries such as China.

In most of Asia demand for computers was spurred by the region's dramatic economic growth, but in Japan, where the economic recovery has been patchy and slow, a number of factors particular to the Japanese market have been responsible. Shipments of personal computers in Japan, one of the world's leading computer markets, rose 36 per cent last year to 3.4m units, IDC states.

This surge can be attributed to a number of factors working in parallel. In the past, high prices, confusion caused by thewide range of proprietary machines and 'user-unfriendliness' had discouraged the average Mr and Mrs Watanbe from making an investment that could turn out to be an expensive white elephant.

Most Japanese households, confined to cramped quarters and using a highly complex written language, have seen little need for more than a word processor to print out addresses for New Year's greeting cards once a year.

However, a sharp fall in PC prices, initiated by US computer makers intent on winning market share in the Japanese market, and the growing ease-of-use of PCs with the spread of Windows software and the practice of pre-installing software, have made PCs much more attractive to consumers.

PCs sold to households in fiscal 1993 grew 60 per cent, according to Mr Makio Inui, industry analyst at Kleinwort Benson in Japan. Mr Inui expects the household market to continue supporting growth *in Japan's PC market*, with a 40 per cent year-on-year rise in the fiscal year to March.

Meanwhile, business users have also started to come back to the market, tempted by dramatic improvements in price for performance levels, and the productivity gains offered by computerisation at a time when the yen's rise has made it crucial for Japanese corporations to increase their competitiveness.

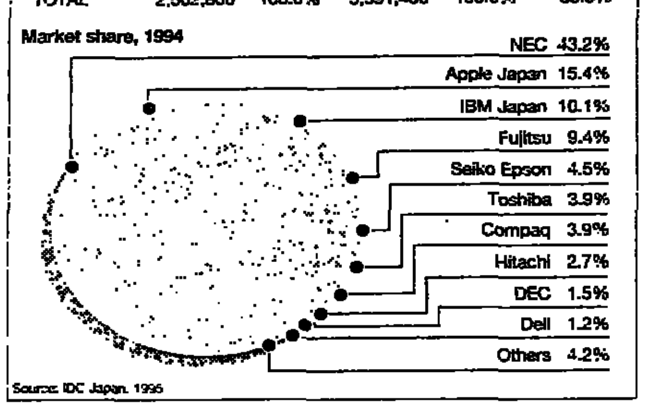
Japan's corporate sector was a key driver of growth in the PC market last year, say analysts at Dataquest. "In an effort to cut costs, increase workers' productivity and become more competitive in the global scene, Japanese corporations rapidly increased their investment in information technology. They realised that there was no other choice but to equip their office workers with PCs."

Dataquest estimates that Japan's PC market will grow 22 per cent to reach 4m shipments this year, boosted in part by network demand from corporate customers.

Japan's PC market

Top vendors	1993 shipments	Share	1994 shipments	Share	Annual % change
NEC	1,227,500	49.0%	1,465,500	43.2%	19.4%
Apple Japan	335,000	13.4%	522,000	15.4%	55.8%
IBM Japan	169,300	6.8%	342,000	10.1%	102.0%
Fujitsu	166,500	6.7%	320,200	9.4%	92.3%
Seiko Epson	159,500	6.4%	152,000	4.5%	-4.7%
Toshiba	154,000	6.2%	133,000	3.9%	-13.6%
Compaq	45,000	1.8%	133,000	3.9%	195.6%
Hitachi	23,500	0.9%	90,500	2.7%	285.1%
DEC Japan	16,500	0.7%	51,000	1.5%	209.1%
Dell Computer	22,000	0.9%	39,000	1.2%	77.3%
Others	184,000	7.2%	143,200	4.2%	-22.2%
TOTAL	2,502,800	100.0%	3,391,400	100.0%	35.5%

Market share, 1994



Source: IDC Japan, 1995

As the Japanese PC market has taken off strongly, the biggest winners have not been the country's own computer companies, such as NEC, the largest PC maker, but foreign companies in the so-called Dos/V camp.

The Dos/V camp, led by US companies such as IBM and Compaq, sells IBM-compatible machines which run the Japanese language Dos operating system. It has greatly increased its share of the Japanese market at the expense of NEC, which has dominated the market with its proprietary system.

According to IDC, Dos/V makers' share of the market rose to 30 per cent with 1m units shipped in 1994. AlthoughNEC remained the top vendor last year, selling nearly 1.5m units, its share has slipped to 43 per cent from well over 50 per cent just a few years ago, IDC says.

NEC's retreat contrasts with the growth in sales of the US computer companies, particularly IBM and Compaq. It was these companies which triggered the sharp fall in PC prices in Japan and which have remained on the offensive in the ongoing fierce price wars.

Compaq has won a significant following in the Japanese market after under-selling its competitors with attractive packages of machines loaded with software. Recently it has lowered its prices by up to 27 per cent. And since last year, consumers wanting to buy the company's popular Presario model, for example, have had to wait for several weeks as retailers scrambled to secure the product.

Compaq *nearly tripled its* shipments in Japan to 133,000 units last year and increased its share of the market to 3.9 per cent, according to IDC.

IBM Japan, which has been in the market longer, doubled its shipments to 342,000 PCs last year and took just over 10 per cent of the market.

Although NEC has hit out with its own price cuts - in December the company cut up to 26 per cent off prices on some models of its popular PC98 series – the company's prices are still relatively high.

"When it comes to ready-to-run machines, IBM-compatible machines are still cheaper," notes Mr Inui at Kleinwort Benson.

IBM's sales grew by 100 per cent over the previous year, while Compaq grew 178 per cent; Fujitsu were up by 83.7 per cent and Apple grew by 49.8 per cent, according to Katsushi Shiga of Dataquest Japan.

> Compaq has won a significant following in Japan's PC market after undercutting competitors

The spread of Windows software has also helped to erode the dominance of NEC which was supported to a large extent by the huge volume of software titles that only ran on its proprietary system. Windows has enabled the Dos/V camp to make use of these software titles which were previously off limits to IBM-compatible machines.

These developments, which have gathered pace in the past year or so, have opened the Japanese market to competition and brought it more in *line with trends in other* industrialised countries.

As it stands, the current course of Japan's PC market points to continuing growth overall and further inroads by US computer companies with global PC operations.

Business demand for PCs is expected to increase further in the years ahead as the Japanese economic recovery gathers steam. Industry analysts expect to see growth in the business sector at about 30 per cent or more in the next few years.

At the same time households are likely to continue buying PCs as CD-Rom software titles increase and interest spreads in on-line communications such as the Internet.

Amid the ongoing expansion of the Japanese market, the rise of US companies is also expected to continue as price becomes more and more the main basis for PC purchases.

In that respect, despite the efforts of Japanese computer makers to reduce their costs by procuring a larger proportion of their components from cheaper south-east Asian sources and restructuring at home, US companies which market their products globally have a better chance to make use of economies of scale.

For Japanese computer makers, their greatest hope lies in the mainframe market, which offers much more promising profits than the PC market.

Although the trend to downsize has substantially reduced the size of the mainframe market, selling mainframes still makes profits for Japanese computer companies, says Mr Inui.

The value of the mainframe market will fall to about half of its peak in 1991 but as Japanese makers have cut their costs aggressively, any rise in sales will benefit profits.

"The worst is over for the mainframe makers," Mr Inui points out. But things are just starting to get tough in Japan's PC market where commoditisa*tion of the PC is making it* increasingly difficult for Japanese companies to realise profits no matter how many units they sell.

"The Japanese market is expected to show the fastest growth in the world" over the next few years, Mr Inui says.

Business users are being drawn back to the computer market, attracted by substantial improvements in price-for-performance levels

■ **European PC market** - The top ten suppliers increase their market share, reports **Paul Taylor**

A swing to big brand names

European PC suppliers seek to sharpen up their PC strategies in the face of US and Asian competition

The European market for personal computers is growing rapidly, but until recently most of the indigenous hardware manufacturers have lacked the dynamism of their US and Asia counterparts.

As a result, the PC market in Europe, which grew by 14 per cent to 11.8m last year, according to Dataquest, the market research organisation, and ranks second only to North America *in terms of size*, is dominated by foreign-owned manufacturers led by Compaq, IBM and Apple Computer.

Dataquest expects the European market to grow at a compound annual growth rate of 11.5 per cent between now and 1988. In common with the global market, the swing away from the 'no-name' clone manufacturers and back towards the big brand names is reflected in growing market concentration.

The top 10 manufacturers in Europe increased their market share from 52 in 1993 to 57 per cent at the end of last year with the second-tier manufacturers – Digital Equipment, *Hewlett-Packard, Escom, Sie*mens Nixdorf and AST – all performing particularly well.

"All these companies are pushing hard to establish themselves in the top flight of five or so players, as history tells us that a mature mass market is unlikely to support more than a few truly global players," said Dataquest's Chris Fell in a recent report.

The need to expand local sales in order to stand a change of competing in the global PC market is underscored by the perception that a PC manufacturer needs to be building at least 1m units and probably closer to 2.5m units a year in order achieve the purchasing economies of scale necessary to compete in the long term.

Such large-scale production also requires a pan-European distribution strategy, something that many of the indigenous European PC manufacturers – even those which have been successful in their domestic market – have so far failed to achieve. "An element of successful and sustainable growth is a balanced growth rate across the countries of Europe," says Dataquest's Mr Fell.

Companies such as Vobis and Dell have seen their previously stellar growth rates slip back to rather more average performances because of their failure to roll out their strategies across the European markets.

Similarly, companies such as Olivetti and SNI, which are particularly strong in one or two key markets, can be adversely affected if those markets experience tough trading conditions – as Olivetti has discovered recently in its core markets of Italy and Spain.

In contrast, in order to compete effectively, all of the big foreign-owned PC manufacturers have established manufacturing operations in western Europe.

Compaq, IBM and Apple all have large European manufacturing sites in either Scotland or Ireland, and all to some extent consider themselves 'honorary' Europeans.

Dell, the direct sales specialist, also has a large distribution centre in Ireland serving Europe, the Middle East and Asia.

Other PC manufacturers to set up operations in Scotland in the past few years include Digital, which launched a new *and successful assault on the* PC market in late 1993, and Escom, the German retail market specialist, which last month acquired 231 former Rumbelows electrical stores from Thorn EMI.

According to Dataquest, PC manufacturing growth in western Europe has outpaced the market – growing by 16 per cent last year to 11.8m units – because PC vendors have set up, or increased, European production, and Western Europe is being used to supply central and eastern Europe.

In recent years, the indigenous European market has been driven by the smaller and more entrepreneurial PC companies including Vobis and Escom in Germany, Tulip in Holland, Viglen, which was acquired by Mr Alan Sugar's Amstrad consumer electronics group last year, Elonex and Opus in the UK.

In Germany, for example, Vobis has a 14.5 per cent market share and has emerged as Europe's largest computer retailer with sales last year of Dm2.66bn, up 43 per cent over the previous year. Total sales of its Highscreen brand in Europe last year were 570,000 *compared with 445,000 in 1993.*

Nevertheless, the performance of Europe's older indigenous manufacturers has mostly been unimpressive – "from a European perspective it is a pity that there are no European PC manufacturers among the top ten in the world," says Andreas Barth, Compaq's senior vice president in charge of Europe, the Middle East and Africa.

He believes the traditional European manufacturers have concentrated too much on high-end products supported by protected local markets and high prices.

"They have relied too heavily on contracts from the public sector," says Mr Barth. "That has made them uncompetitive."

There are now signs, however, that Europe's traditional computer manufacturers have finally woken up to the need to develop effective PC strategies.

As Mr Gerhard Schulmeyer, SNI's chief executive, noted last month, "the PC market is very important to us," not just because of the volumes involved, or the profit potential, "but because PCs are changing corporate infrastructures and the way companies do business."

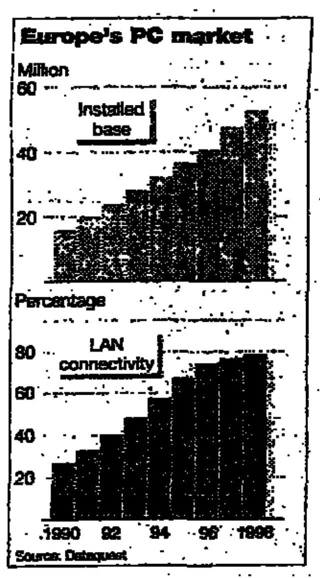
SNI posted a 9 per cent increase in turnover and an 18 per cent increase in orders in the first five months of its *financial year – somewhat* better than originally forecast. On this basis, once restructuring costs are deducted, SNI should break even this year for the first time since it was created following the takeover of Nixdorf Computer in 1990.

SNIs PC business is the fastest growing part of its operations. Last year SNI manufactured and sold 450,000 PCs worldwide, including 400,000 in Europe – a 57 per cent increase. Along with its rivals, SNI is targeting growing consumer and small business sales and is developing *indirect sales* channels and has taken a 10 per cent equity stake in Escom.

Similarly, a revitalised ICL, in which Fujitsu of Japan has a majority stake, announced last month that it was entering the retail market for the first time with a range of competitively-priced multimedia machines marketed under the Fujitsu ICL marque to be sold in the high street.

In addition to the new retail strategy – which is based on indirect rather than ICLs traditional direct sales model – ICL also announced an expanded range *of business PCs, note*books and servers aimed at turning ICL into one of the top four suppliers on PCs in Europe within three years – last year the group sold 300,000 PCs in Europe.

Europe's PC market



Source: Dataquest

Although uncertainty still surrounds the French government's attempts to sell a majority stake in Groupe Bull, following a series of setbacks including the withdrawal of several potential bidders for equity stakes, the state-owned group did manage to return to profit at the operating level last year. The strongest recovery in Bull's operations was achieved at Zenith Data Systems, Bull's personal computer division, which broke even last summer after a series of big losses.

In contrast, Olivetti is expected to report a net loss for 1994 of about L500bn, slightly worse than in 1993, and will fail, albeit narrowly, to meet its own target of breaking even at operating profit level. The group's results should be announced formally at the end of this month or beginning of May.

What worries analysts is the apparent erosion of Olivetti's market share and margins in the personal computer sector.

The personal computer division accounts for about 20 per cent of the group's L9,000bn *annual* turnover and, in volume terms, PC sales rose by almost 30 per cent last year.

But income from PCs is still not enough to cover the commercial network and research and development expenditure, and the losses are unlikely to be reversed until 1996. While market share by volume has dropped, the group is simultaneously moving into higher value, lower volume products, increasing its share of the higher end of the market.

■ ***Data mining*** - *Delving into the database* - **by Michael Dempsey**

A way to reduce the information overload

New systems help to pinpoint wider sales opportunities

In its short life so far, the desktop PC has acquired formidable processing power, transforming a humble office tool into something far more significant.

The large mainframe computer has receded into the distance and networked PCs have become the repository for critical management data. But technical advances have created their own problems. How can an organisation make the most of information scattered around a network?

The proliferation of electronic messaging has only added to the confusion, with managers deluged by information they lack the time to digest.

Sales and marketing, for example, are areas of business that frequently suffer from information overload. Softa is a St Albans-based management consultancy that specialises in knitting together islands of data.

Mr Stephen Arnold, Softa's chairman, observes that while huge amounts of data are necessary to obtain correct views about various product lines, the act of *interpretation* is a challenge.

"It's often very, very difficult for our clients – they get blinded by the quantity of information stored across PC networks. The answers are out there, but they are fragmented. Our strategy is to create a structured database that fits into their sales and marketing policy."

For upwards of £100,000, Softa consultants will spend six months with a company writing a system that should allow users to delve into the database without wasting time or stopping to consult colleagues. The system responds to rules that are consistent with the client's working practices. This type of project is often referred to as 'data mining.' The insurance sector has begun to take a keen interest in the potential for systems that can extract new market segments from great reams of data generated by customers. Identifying a gap in the market for just one new financial product can be highly lucrative.

Programs that exploit the potential for co-operative working between PC users have become established in recent years. Lotus Notes, the package that links workgroups of users now boasts more than 500,000 users worldwide. Meanwhile, AT&T has just begun installing workshare software as a standard feature on its PC range.

These developments acknowledge that corporate users are weary with the limitations of desktop computing, and have learned to squeeze more productivity from both users and hardware.

CASE STUDY Tapping in to the company's database · **by Michael Dempsey**

How to get the right data on the right desk

A senior executive of the Wellcome Foundation, the UK pharmaceuticals group recently acquired by Glaxo, found a note on his desk late in February. It introduced him to the executive information system (EIS) that had just been installed on his personal computer.

Unlike many communications from the IT department this message was clear and practical. It explained that although a user-guide to the system *was* available, "we don't expect you to read it."

The note's author was Roger Shaw (left), corporate EIS manager at Wellcome, among whose tasks is implementing an *international board level* information system that will provide rapid access to analytical data. Shaw knows his users well. The 60 top people for whom Wellcome's corporate EIS was designed have better things to do than delve into manuals - "if they've got to read *the user guide, I've* failed," he admits.

Wellcome has faced the twin challenge of funnelling relevant information on to the right desk while making the delivery mechanism friendly for a very well-defined user community.

The process began three years ago when the drugs company identified the need to make the provision of information to its top personnel more effective. Shaw conducted interviews with 45 executives in the US and UK. They were asked a series of *oblique questions* intended to establish what kind of information they were not getting.

Shaw distilled this research into a checklist of critical data types, including areas such as market performance, share prices and R&D, a function that has driven Wellcome.

Powerful PCs were already commonplace in the company, but Shaw wanted to combine a tool that manipulated complex financial and technical data with ease of access. *He decided to use Lightship*, a suite of software from Pilot, a Boston-based US systems house.

Lightship's strength is in handling numeric data. The Lightship database can be interrogated via simple icons while delivering information *from the kind of sources that* are key to decision-making within Wellcome. An industry standard Novell network links the desktop PCs.

The best-selling Lotus Notes program also resides within Wellcome's EIS. Notes is a workgroup product, designed to link *pockets of* users in one corporate constellation. But Wellcome only relies on on Notes for text-based work. And Pilot's Lightship remains the core application.

"Notes is *splendid*," *says* Shaw, "but the user interface is not for the technophobic."

The EIS has begun operations in Germany, and Wellcome has been planning to link up executives shortly in the rest of Europe and the US. Shaw sees the EIS as a *natural* reaction to traditional difficulties in extracting pertinent and comprehensible data from larger mainframe computer systems. "Rapid access to analytical information is paramount and it's highly regarded. These people haven't got the time to wait for a report to be cranked out of a computer."

It is worth noting that despite this formidable information armoury, the Wellcome Foundation was not able to anticipate or fend off a hostile £9bn takeover bid from rival Glaxo on March 16.

EIS technology is just one asset in a competitive environment. It may boost access to an existing pool of business acumen, but it cannot halt market forces.

Bill Gates, Microsoft's chairman, (right), at the recent 'Windows in Finance' show in Stockholm, viewing a 32-bit version of the Devon Derivatives System for Windows from SunGard Capital Markets, running on the NT platform. SunGard's system is claimed to be the first large-scale Windows NT implementation, in terms of processing speed and risk management. Also pictured is Patrick Brazel, managing director SunGard's global risk division.

■ US trends – The PC is now a true mass market consumer product, reports **Louise Kehoe**

Home PC market surges ahead

America's home computer buyers are the most demanding in terms of PC performance and multimedia features

In the US personal computer market, 1994 was the "year of the consumer", with PC sales for use in the home soaring to almost 6m, a 40 per cent increase over the previous year. The trend is reshaping the PC industry as manufacturers and software developers increasingly focus their attention on the consumer sector.

Fifteen years after the industry's pioneers dreamed of putting a PC "on every desktop and in every home," the PC has finally become a true mass market consumer product. Already, more than a third of US households have a PC and a quarter of those with PCs use more than one computer in the home.

The PC has solidified its position as the 'hot' appliance in US pop culture," says Bruce Stephens director of worldwide personal systems research for IDC, another market research group. "The US leads the world in expanding the breadth of technologies, customers and uses for the PC."

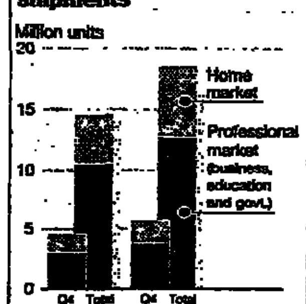
Home PC buyers now represent the fastest growing segment of the US PC market. While US sales of PCs to businesses, government and education rose by about 21 per cent last year, the home segment grew almost twice as fast.

Of the 18.6m PCs shipped in US last year, 5.9m were for the home market, according to Dataquest, the US market research group. In a reversal of trends that have dominated the PC market throughout its history, home computer buyers rather than businesses are now driving the adoption of new technology and dominating the efforts of software developers.

"The PC is fast becoming a staple of the American home," says Philippe de Marcillac, director and principal analyst of Dataquest's personal computers worldwide program.

While the industry used to lump home computer sales into the "small office/home office" (Soho) segment, assuming that most home PC purchases were work related, consumer purchases are now being driven largely by entertainment, information and home economics applications. Just as spreadsheets and desktop publishing software drove the early growth of PC sales to businesses, today a raft of new applications is attracting home PC buyers. In particular, multimedia PC applications such as games and video "books" have helped to turn the PC into a mass market product. About 80 per cent of the 6.9m multimedia PCs sold in the US last year went to home users, according to Dataquest.

US personal computer shipments



Source: Dataquest

Low-cost commercial on-line services such as Prodigy, America Online and Compuserve, as well as access to the Internet, are also proving to be a strong incentive for US consumers to purchase PCs. Virtually all PCs sold through retail outlets in the US now incorporate a modem.

Another heavily advertised application that is helping to boost demand in the US home PC market is Quicken, the Intuit personal finance management program that enables people to organise their finances and pay bills electronically.

The consumer PC boom marks the reversal of trends that have shaped the PC market over the past decade. Until now, business PC users have generally purchased the highest performance PCs. Today, it is home PC buyers who are most demanding in terms of PC performance and features.

Most of the approximately 5m PCs based on Intel's Pentium chip that were sold last year went to consumer purchasers, according to industry data. A very high proportion of PCs sold to US consumers also included a CD-Rom drive, sound card and speakers, to facilitate multimedia applications.

In contrast, business purchasers have been slower to shift to Pentium-class PCs and business applications of multimedia are limited to specialist areas such as training and graphics design.

US PC market conditions now favour those companies that are strongest in the consumer sector, says Bruce Ryon, Dataquest analyst. In particular, Apple Computer, Packard Bell and Compaq Computer have benefited from booming home PC sales.

According to IDC's estimates, the US market grew by 23 per cent last year, measured in terms of unit shipments. Compaq Computer emerged as the US market leader in 1994 with 12.8 per cent of the market and a 61 per cent increase in shipments. Apple Computer was a close second with 12.2 per cent market share and a modest 8 per cent rise in shipments.

Packard Bell ranked third in unit shipments with a 10.8 per cent market share, as it increased sales volume by 100 per cent during the year. The company is the clear leader in the retail segment, according to IDC analysts, and may emerge as the overall market leader for desktop systems because portable PCs account for a significant portion of Compaq and Apple sales.

However, 1994 was a difficult year for IBM's personal computer division. IBM was the only one the top ten PC manufacturers to see its sales volume decline during the year, (down by 8 per cent) as the company struggled to work off excess inventory in older products and meet demand for new models.

In the consumer sector, IBM under-estimated demand for its latest Aptiva models, effectively handing over sales opportunities to rivals. The company's problems were compounded by delays in shipping a new line of PCs for corporate buyers.

Other high growth companies were Toshiba, with shipments up 108 per cent; AT&T GIS, up 93 per cent; and Hewlett-Packard, up 92 per cent.

As PC manufacturers struggle to differentiate products that are increasingly compared only in terms of price, building brand name recognition has become all important. PC manufacturers spent record amounts on advertising, including elaborate TV campaigns, during the fourth quarter of 1994.

■ Office software 'suites' – by Martin Banks

Battle lines being drawn

In the long-term, object technology will allow users to generate their own customised software 'suites'

There is more to applications suites than meets the eye. These collections of related 'productivity' tools that traditionally include word processor, spreadsheet, database, communications and presentation tools, generally sold under the generic sobriquets of 'Office' or 'Works', are set to be the field on which the leading object technology contenders do battle for the hearts, minds and long-term business of users.

Object technology is undoubtedly the key software technology for the future, allowing applications to be built up out of functional components, rather bought complete.

There are two leading contenders for the standard technology that allows these components to work together: one is called OpenDoc, and is proposed by the likes of IBM, Apple Computer and Novell. The other is Object Linking and Embedding (OLE) from Microsoft.

That the suites market is to be a key battleground may at first appear to be a contradiction, for they are designed to bring together a range of complete applications, many with significant functional richness in their own right, into a single application. This is hardly the stuff from which 'component' software should derive.

As they stand at the moment, such an observation would be correct, but the strength of the suites market, both in the personal and corporate business use of PCs, means it is now the ideal launch-pad for any new development in software technology.

The notion of the application suite has, of course, been a fond dream of the PC-based software vendors for many years. There have been several attempts by vendors to develop linked sets of applications that were commonly employed by PC users. The early attempts failed.

Most commonly, the vendors were known for one particular application and had limited expertise in building the other components. Most suites, therefore, consisted of several weak products supporting a good one. Today, these problems have been overcome.

The result has been spectacular for both the users and the vendors. Suites have become the dominant force in the PC applications market, and Microsoft has become as dominant in this business as it has in operating systems.

According to Dataquest, for example, the revenue Microsoft generated from its suites products alone in the first half of 1994 was more than the total combined revenues of its two top competitors, Novell and Lotus, during the same period. Known as Microsoft Office, its suite brings together applications such as the Word for Windows word processor, the Excel spreadsheet, the PowerPoint graphics package and Microsoft Mail. It is available in two versions, a standard one for 'Soho' (small office, home office) users, costing £360 in the UK, and a Professional version for corporate users, which include the Access Database, for £460. The company also has a low-end, less featured suite called Microsoft Works.

The pricing, roughly equivalent to the cost of a single application two years ago, has distorted the PC applications market considerably. If users can purchase four or five applications for the price of one, they *will* do. The effect can be seen in the results from market researchers. According to Dataquest, Microsoft not only dominates the suites market, but also most of the individual applications sectors, as a direct consequence.

Analysts at Romtec suggest that, in the UK, Microsoft's share of the business rose from 70 per cent during the first half of 1994 to 77 per cent in the second half.

Microsoft's nearest rival is Lotus Development with its SmartSuite package. This, according to researchers at Context, has under 28 per cent of the UK suites market, which leaves very little business for others.

SmartSuite was an early contender in the revived suites marketplace, but most observers suggest it has suffered by having its component applications enhanced out of phase with each other. This has meant that at least one component is relatively weaker than the rest.

More recently, other contenders have appeared, most notably Novell with its Perfect Office. This, in fact, comes out of WordPerfect, the company that used to dominate the word processing sector, which Novell bought a year ago. This is a good example of how suites have become a marketing-dominated business, for it includes applications such as Quattro Pro and Paradox from Borland.

The key element in the growth of the suites business is their exploitation of the built-in facilities in Windows, such as Cut and Paste, to provide tight integration between the individual applications. It is this, coupled to aggressive pricing, that has created the dominance of suites in the marketplace.

Users can write and format documents, insert prepared spreadsheet data, graphics and reports from databases into those documents, and electronic mail them to recipients across local or wide-area networks around the world, all within the same single application environment.

This can also be achieved more quickly than with disparate individual applications, even if they have claims to being 'best of breed.'

It is the users' obvious pleasure in this integration which makes suites the future object technology battleground. Long-term, object technology means that users will be able to generate their own customised 'suites' from functional applications components.

The battle between supporters of OpenDoc and OLE concerns which standard such components should meet. Both are designed to integrate components tightly so that, for example, changes made to a spreadsheet are automatically reflected in examples of that spreadsheet that appear in other documents.

It is also a battle between technical superiority and availability. OpenDOC is generally seen as a superior solution to the problem, but practical components based on it are not expected until later this year at the earliest.

OLE, on the other hand, is already in use by Microsoft in the Office suite, and a growing number of other software companies.

For both technologies, the suite is now seen as the basis of the library of object 'components,' the core around which customised applications will be built.

Thus, the company that 'owns' the core business functions library will be in a strong position to dominate the development of most software markets into the future. Microsoft is unashamedly using its current dominance of the suites marketplace as the fulcrum from which it hopes to leverage the future potential of object technology as well.

IT software at work

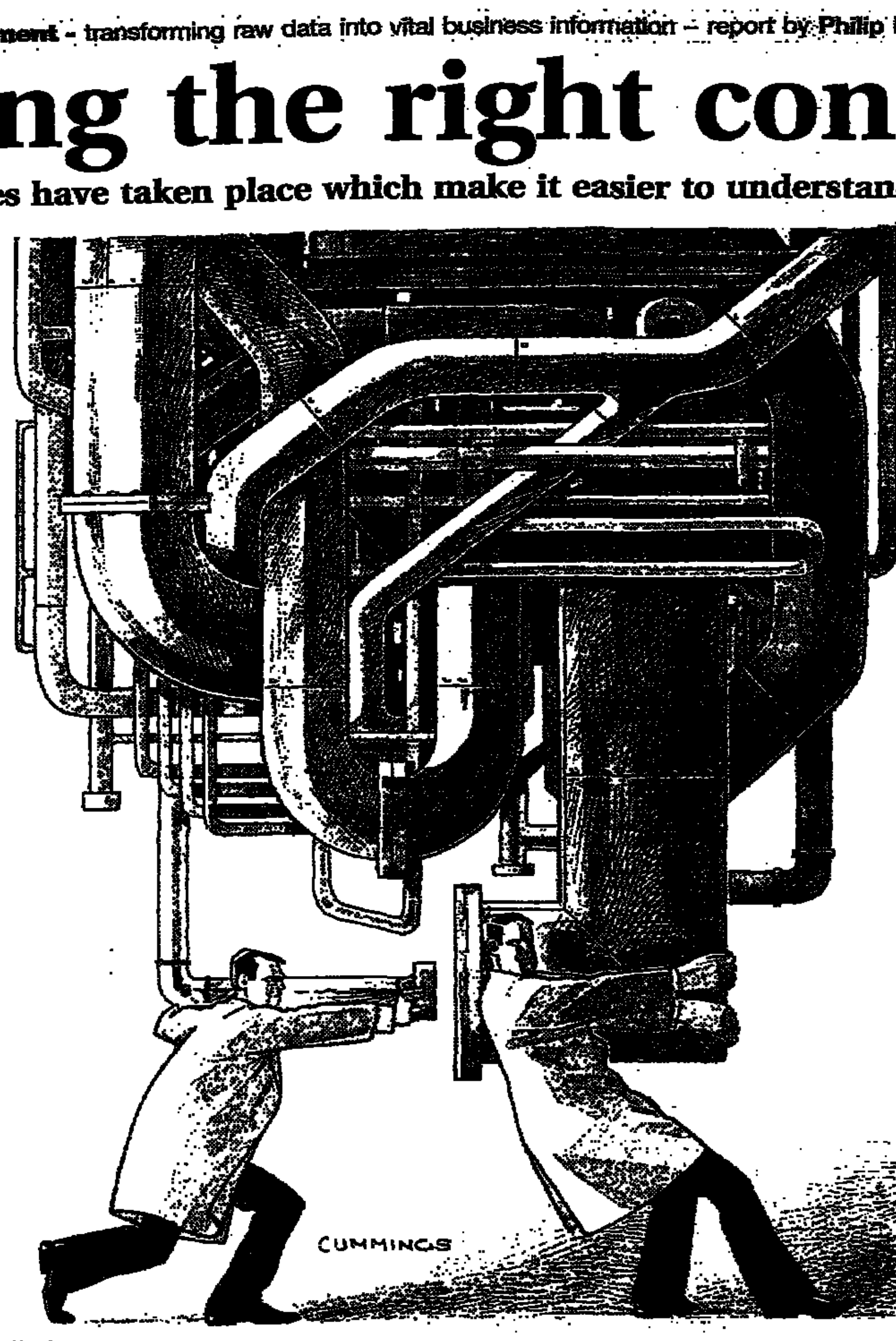
Database and development tools

- The March issue of the FT-IT Review looked at new business applications for the 'data warehouse.' This 'Software at Work' section continues the theme with an examination of the underlying technology of database management systems (DMBS).
- Database technology started with hierarchical systems in the 1970s. Previously, programs 'owned' their own data. The database created a common storage for data, organising it into separate files, each with a unique index or key for access. This format worked well for predictable transactions, such as updating bank accounts, but it meant that a search for particular information required a custom-built program, taking some weeks to test and deliver in the third-generation Cobol programming language in which most business applications were written.
- **Relational databases** (rdbms) arrange data into a series of tables or 'join' files, so that any item can in theory be a key. This can duplicate the same data within the database, and can slow operations, but makes data far more accessible. Old-style hierarchical databases are usually faster in performance, but less flexible, so relational database vendors worked to optimise performance for operational work and transaction processing.

Database management - transforming raw data into vital business information - report by Philip Manchester

Making the right connections

Important changes have taken place which make it easier to understand data and turn it into content-rich information.



All business relies on data and the primary purpose of information technology (IT) is to control data. Indeed, in the early days of computing, IT departments were called data processing departments. The change to IT came when it was realised that information was more important: information is data with meaning and context.

Database management system (DBMS) software is the mechanism which turns raw data into useful information. DBMS software enables businesses to store and access data.

But it also allows data to be manipulated in many different ways.

Staff who take orders can, for example, use a customer database to check creditworthiness and file new orders. Accountancy staff can use the same data to chase payments and management can use it to track buying trends.

Since the late 1970s, two important changes have occurred in DBMS technology. One is the emergence of the relational model of data and the other is the separation of DBMS software into two separate components.

The relational model sees data in terms of two-dimensional tables – similar to Lotus 1-2-3 spreadsheets. This makes data easier to understand and easier to turn into information.

The separation of DBMS software into two parts follows directly from the relational model. Although apparently simple from the outside, the relational model is complicated to manage behind the screen. This led DBMS suppliers to separate the presentation of data from its management.

The desktop component of modern DBMS sets up requests and presents the data to the user. The other part usually sits in a larger computer elsewhere on the company network, and it manages how and where the data is stored. The two parts are often referred to as the client and the server.

DBMS clients and servers communicate with each other using a notation called Structured Query Language (SQL). Desktop computer users can, for example, access data on their company database with tools which send SQL requests across the network to the server system.

Originating at IBM in the 1970s as part of its work in relational DBMS, SQL is accepted as a standard by all of the leading software suppliers. This means – in theory at least – that it is possible to link the front-end software from one supplier to the back end server software from other suppliers.

Unfortunately, it is not so simple in practice. Individual suppliers have extended SQL to use special features in their products.

Software suppliers have adopted a number of different approaches to solve this problem. Software giant Microsoft has, for example, introduced the Open Database Connectivity (ODBC) model to help remove the inconsistencies in different DBMS suppliers' versions of SQL. It is also promoting its Object Linking and Embedding (OLE) approach to enable software components to communicate with each other.

ODBC, which relates directly to DBMS, acts as an insulating layer between the desktop computer and one or more databases.

Mr Tony Hill, UK managing director of the software tool builder Intersolv, sees ODBC emerging as an important standard for linking databases: "We feel that software developers should be concentrating on meeting business requirements. But they are faced with a wide range of different databases and need something to hide the differences. ODBC does that."

Intersolv has concentrated its efforts on building what are called drivers for ODBC. These all look the same to the desktop application – but translate requests to individual databases in their own version of SQL. Despite this extra layer of software, Mr Hill claims there is only a modest reduction in performance:

"Early attempts to use ODBC did not perform very well. But we believe we have cracked the problem of writing fast drivers. Typically, there is less than a 3 per cent performance degradation now."

Many DBMS suppliers have taken Intersolv's ODBC drivers and added them to their own products – among them Computer Associates (CA). Mr Rob Hailstone, UK product manager for CA accepts that ODBC's reputation for performance has not been high. But he confirms Mr Hill's claims for the new ODBC software.

"We are building them into our development tools and are finding great performance improvements.

"The beauty is that we can now sell our tools to users of other DBMS software like IBM's DB2 and Informix," he adds.

While ODBC solves some of the problems of linking applications to multiple databases, there are, however, new problems facing tool builders and DBMS suppliers.

"While ODBC helps access to lots of different databases, because it gets around the incompatibilities in SQL, it doesn't solve the problems of managing data cross applications," says Mr Gordon Eubanks, chief executive of the US software tools supplier Symantec.

The original concepts of client/server computing have grown from their DBMS origins to cover other processes. Companies want, for example, to be able to include business rules relating to applications. When an order clerk calls up a customer record to check creditworthiness, for example, it may be company policy always to check the outstanding balance on the sales ledger. Operations like this cannot be handled by simple SQL and require an extra layer of software.

"The problem goes back to managing the logical data model of the business. SQL was never intended to do this – it was designed to get at data," says Mr Eubanks.

"You need to be able to maintain a view of data across all applications. That's where tools come in – they can enforce consistency and company policies throughout the system," he adds.

Mr Eubanks believes it is the role of the development tool builder to hide the complexity of linking applications to DBMS servers. He sees emerging object-oriented software technology such as Microsoft's OLE as the key. The object-oriented approach defines business processes in terms of self-contained components.

"If you can define business rules as objects – then you improve consistency and maintenance. You can re-use components at a high level which means something to the business."

Mr Andy Smith, European marketing director for DBMS supplier Informix also sees object-oriented design as important.

"None of the existing standards for connecting DBMS really address the problem. Users do not want to get involved in all the complexities but objects make it easier to build boundaries around application processes and link them together more easily."

There can be no doubt that the emergence of the relational DBMS has helped to reduce the complexities of storing and accessing data. It has also helped companies to find innovative ways to manipulate precious data resources and convert them into useful information.

The range of development tools now available promises to exploit this information for the benefit of business.

Project at Lloyd's: see page 17


Gordon Eubanks of Symantec: he firmly believes it is the role of the development tool builder to hide the complexity of linking applications

CASE STUDY Paribas Capital Markets' worldwide network

Rapid financial data for traders

The international nature of the financial markets places special demands on information technology systems. Trading companies need to combine data from different sources quickly and effectively if they are to be successful, *writes Philip Manchester*.

Paribas Capital Markets (PCM), an operational division of Banque Paribas, supports its clients in the global financial markets with a worldwide network based on a common integrated database.

PCM operates in the primary and secondary bond and equity markets. It also handles currency and interest rate swaps. It has offices in Paris, London, New York, Tokyo, Frankfurt, Geneva, Singapore and Sydney. Traders in these offices need instant access to large amounts of data to carry out tasks such as pricing and revaluing portfolios, determining profit and loss on deals and keeping track of cash positions.

When PCM set out to build the worldwide network in 1993, it faced two tough problems. Firstly, it had to be able to bring data together from different sources and secondly it had to develop 'front end' user interfaces to access data quickly.

PCM uses Ingres and Sybase databases – accessed through the Structured Query Language (SQL). They run on hardware from DEC with either DEC workstations or personal computers at the front end. Data also comes into the system from data 'feed' services such as Kapiti's Financial Information Toolkit.

SQL allows data from the databases to be combined through a 'gateway' so that it appears on the trader's screen as a single entity – regardless of where it has come from.

Although this involves an extra layer of software, PCM says this does not affect performance too much – "sometimes, we gain, even though the networking software is a little inefficient. When there is a degradation, it's not significant," says an IT official.

When it came to building the front-end interfaces, however, performance problems were more acute. Windows 4GL, the development tool supplied with the Ingres database, was not efficient enough to handle the complex screens. Many of the users need as many as 50 different screen formats.

"The Ingres Windows 4GL took an unacceptably long time when re-drawing the screen. Although the presentation of the data is relatively simple, there is a lot of calculation needed. The 4GL application will lock out the whole application while it is working and this was not acceptable."

PCM decided, therefore, to look around for a software tool that could build a more flexible front end. It chose Open Interface from the US software company Neuron Data – mainly because it could cope with doing the necessary background calculations without locking out the screen.

PCM acknowledges that it takes longer to build applications with Open Interface than it does with the 4GL tool but it says that the extra investment in time and effort is worth the result – "the development time is longer – but the quality of the product is higher. And the more we work with it, the more we're able to re-use some of the code."

CASE STUDY Developments by Sainsbury's supermarket chain

Key link with 300 retail outlets

The humble till at the supermarket checkout sits at the front end of an increasingly complex information technology system.

Each bar-coded item which passes over the till's scanner calls up pricing information and adds it to the bill. The same data also starts procedures that reach right back to the heart of the supermarket's distribution and stock control system, *writes Philip Manchester*.

Database software plays a central part. It records local sales and re-ordering schedules to ensure the shelves are well stocked. And it can be used for historical trends analysis to detect seasonal shifts in sales. In the competitive retail market, fast and efficient database technology is essential.

Three years ago, Sainsbury's, the UK's leading supermarket chain, decided that it needed to re-design its operational support systems around a distributed database – "we knew we had to take a fresh look and after a lengthy review period we went for a distributed system," explains Mr Martin Wright, technical infrastructure manager at Sainsbury's.

The main need was for a system which could hold data locally at Sainsbury's branches. During the working day, the checkout tills feed sales data to the local database. This data is then fed to a central system to initiate orders for future deliveries.


Martin Wright: 'We took a fresh look at the requirements'

But as Mr Wright points out, the sales based re-ordering (Sabre) system is more than a system for capturing data. It links to other operational functions within Sainsbury's and includes some advanced analysis software.

"Sabre has some complex and secret algorithms for calculating future orders," he says. Unusually, Sainsbury's chose its database software first – and then looked for appropriate hardware to support it.

"There were two separate decisions; first we wanted to find the right database technology and, once we had found it, we then looked for a hardware supplier. We finally chose Hewlett Packard," Mr Wright explains.

Sainsbury's assessed three database products: Oracle, Sybase and Ingres. Mr Wright says that it chose Ingres because of the need for distributed data. Sainsbury's has 300 branches across the UK and it was essential that they were all supported with the same system – "Ingres was – and still is – ahead of the rest in distributed database. The ability to run it in 300 distributed locations was decisive."

At the time of the original contract, Ingres was supplied by the US software company ASK. It was acquired by the software giant Computer Associates (CA) in 1994. CA has continued to develop the distributed technology in Ingres.

Distributing data in this way allows Sainsbury's to provide local management information for the branch managers.

But the Sabre system also connects to databases on other systems – primarily the system that controls deliveries of goods to the branches. Sabre uses the Structured Query Language (SQL) to link to a DB2 database running on an IBM mainframe.

"When a lorry arrives at a branch, delivery data is fed back to the central DB2 database using SQL," says Mr Wright. Initially, the data had to be routed through a central computer before going to the IBM mainframe. This highlights the problems of linking different databases.

Mr Wright says, however, that CA has recently delivered enhancements that allow individual branch computers to link to the IBM mainframe directly.

A system as large as Sabre is obviously a costly venture. In addition to the hardware and software costs, it required a new set of technology skills from Sainsbury's development staff. Mr Wright says the main lesson Sainsbury's has learned from the Sabre project is to move quickly once the development decision has been made.

Despite the complexity of such a large project, Sainsbury's expects Sabre to be fully operational in its growing network of supermarkets by the autumn.

SOFTWARE MARKET

1 EXCHEQUER SOFTWARE LTD.

1 West Hill Place,
Commercial Road, Bournemouth BH2 5NX
Tel: 01202 298008 Fax: 01202 298001

Company Description:
Exchequer is a highly innovative accounting system. It is the pioneer of features such as "Drill-Down", "Non-Destructive Periods-ends" and "Hot Keys". It also has excellent Multi-Currency features.
In a review the FT quoted Exchequer as "an astonishing package... taking accounting s/w into a new era.
User includes M&S, Oxford Univ Press, Hasbro, BASF.
call NOW for details.

Hardware:
PC, Novell & PC LAN's.

Coverage:
Worldwide

Applications:
S/L, P/L, N/L, C/B, SOP, POP, Stock, BOM, R/Writer, Import.

2 JBA

Turnpike Gate House, Alcester Heath
Alcester, Warwickshire B49 5JG

Company Description:
Guidelines is a graphical client server application development tool that allows developers to design business applications that can run on multiple platforms. Guidelines generates code in C++ placing users on the threshold of object oriented programming, with reusability of code and the rapid rebuilding of applications being the main advantages, along with the ideal of real platform independent applications.

Hardware:
Multi Platform. Costs available on request.

Coverage:
Worldwide

Applications:
Accounting, Customer Service, Distribution and Production, with specific software for the Drinks, Apparel, Plant, Tool and Equipment hire industries.

3 SELECT SOFTWARE TOOLS

Idsall House, High St., Prestbury
Cheltenham, Gloucestershire GL52 3AY
Tel: 0124 222 6553 Fax: 0124 225 1491

Company Description:
Select Software Toos is a privately owned company based in Cheltenham, Glos. With a growing network of offices throughout the US. Select develops and markets object oriented model driven tools and services to support the needs of organisations making the shift to client-server technology as a result of rapid business change.

Hardware:
IBM Compatibles and Windows NT

Coverage:
2,00000 customers worldwide

Applications:
Select OMT professionals workbench.

4 ICL FINANCIAL SERVICES

26 Finsbury Square
London EC2A 1DS
Tel: 0171-614-4046 Fax: 0171-614-4038

Company Description:
ICL financial services supplies solutions & system integration skills to investment & retail banks, building societies and insurance companies. Solutions include: branch cashier systems; point of sale; core administration systems; wholesale banking; business process re-engineering; workflow management; groupware; state of the art interactive multimedia systems.

Hardware:
Applications run on a variety of different systems.

Coverage:
United Kingdom & International

5 OBJECT MANAGEMENT LTD

Great Moretons, High Street,
Westerham, Kent TN16 1RQ
Tel: 01959-565794 Fax: 01959-56795

Company Description:
Specialists in Windows-based Rapid Application Development using Object-Oriented techniques and programming tools (inc. Visual Basic, C++, Access2 and PowerBuilder). OML implement Enterprise Information Systems and general business systems with user-friendly graphical interfaces, quickly and cost-effectively.

Hardware:
IBM PCs & compatibles, standalone or with LAN or WAN links.

Coverage:
European Economic Community.

Applications:
Any system where there is a need to convert data into *INFORMATION*

6 MOVEX (UK) LIMITED

Savile House, Savile Road,
Elland, Yorks HX5 0NU
Tel: 01422 377611 Fax: 01422 310109

Company Description:
"Integration, flexibility, ongoing and proven development path, real commitment to high quality international service and support" are just some of the reasons why over 1100 major companies have chosen MOVEX software - often to support BPR and Rightsizing. Over 80% of MOVEX's sales are to pan-European companies, producing a turnover of £74 million per annum.

Hardware:
IBM AS/400. GUI includes Windows and OS/2.
Price on application, includes user input to development.

Coverage:
45 Service Centres worldwide.
Concurrent translations into 12 languages

Applications:
Truly integrated manufacturing, financial and distribution software. Strategy includes OOT and Client/Server.

7 BOOLE & BABBAGE EUROPE

Burnham House, Clivemount Road,
Maidenhead SL6 7BU.
Tel: 01628 771909 Fax: 01628 770458

Company Description:
Boole & Babbage is the worldwide leader in the development and support of enterprise automation software for distributed systems.
Command/Post provides integrated automated operations, fault and alarm management for multi-vendor data centres and networks. This facilitates control of distributed systems from a centralised point.
Ensigns simplifies, automates and optimises all of the everyday administrative functions of Unix systems. Ensign consists of Local Manager for individual Unix systems, Central Manager controlling several machines and Alarm Manager which actively surveys and prevents critical situations occurring.

Hardware:
Variety of Unix platforms.

Coverage:
Worldwide

Applications:
Computer Operations, Technical Support, Help Desk.

8 KINROSS COMPUTER SYSTEMS LTD

Station House, South Street,
Milnathort, Tayside. KY 13 7XB
Tel: 01577 863995 Fax: 01577 864613

Company Description:
IMMCOT is the most comprehensive and adaptable system for Physical Commodity Traders fully integrated and incorporating Multi-currency Accounts, Contract Administration, Position Reporting, Shipping & Execution, For-ex Contracts & Futures Modules. Extensive Report & Enquiry facilities plus easy-to-use 4GL Report Writer.

Hardware:
Data General, DEC, IBM

9 DELRINA (UK) CORP

6 Elstree Gate, Elstree Way
Borehamwood, Herts, WD6 1JD
Tel 0181 207 3163 Fax 0181 207 5316

Company Description:
Delrina FormFlow is a powerful application for quickly creating forms to fill, print or route across e-mail. FormFlow's extensive range of design features include logical and mathematical functions for "intelligent" form filling and electronic signature encryption for system security. It ties to standard e-mail systems and includes advanced database support, linking directly to desktop, SQL and ODBC databases.

Hardware:
Minimum system requirements 4MB Ram, Windows 3.1,4mb disk space Formflow starter kit £299.

Coverage:
Global

Applications:
Corporate and remote electronic for forms processing.

10 KJ LIMITED

Coppermill, 381 Archer Road,
Stevenage, Herts SG1 5HF
Tel: 01438 353601 Fax: 01438 353601

Company Description:
Consultancy and training for organisations requiring help to implement good testing practices for the automation of testing and generation of BS en IS09000 quality records •flexible strategies for increased productivity, reduced risk and cost •creation of application test suites for regression/acceptance testing •in-house training courses also available.

Hardware:
Down-to-earth price £350 per day plus minimal travelling expenses

Coverage:
United Kingdom

Applications:
Independent advice on testing and its automation.

11 BUSINESS SIMULATIONS LIMITED

30 St James's Street
London SW1A 1HB
Tel 0171 925 0636 Fax 0171 925 0638

Company Description:
Cardbox for windows is an information storage and retrieval system with dynamic relational linking 4000 text fields of any size; any or all words can be indexed for fast retrieval. Images can be attached to each record. 16 million records features include field validation, encryption, bar codes, olez compatibility. programmable via ole automation. free demo.

Hardware:
386 or above; disk space 3mb mm 2mb; £375 s/u network £575+

Coverage:
Worldwide

Applications:
Central; & Local Government, Police, Libraries, Industry, Medical.

12 DIAGRAM SYSTEMS LTD

Abbey Crt
90-96 High Street, Burnham Bucks SL1 7JT
Tel 01628 663695 Fax 01628 663322

Company Description:
CFT- cross File Transfer enables data to be transferred between virtually all hardware platforms, using many different networks. CFT allows pre & post processing, remote job control and the transfer of data to be built in to business applications. CFT is very secure & can be customised in terms of appearance and functionality for end users.

Hardware:
CFT supports the majority of hardware platforms and networks.

Coverage:
Worldwide.

Applications:
Motor, insurance, Retail and Finance.

13 CALIFORNIA SOFTWARE INT

The Grange, Summerhouse Lane
Harmondsworth Middlesex UB7 OAW
Tel 0181 564 7899 Fax 0181 564 7896

Company Description:
Baby /4 XX and Baby/36 complete software systems for use on PCs replicating the IBM midrange RPG environment for individual users or networks. Bring your applications, unchanged, up-to-date on OS/2, Windows-NT (for Baby/4XX), Windows or Dos (for Baby/36). No redevelopment, no programmer retraining required. Sound exciting? call us today.

Hardware:
386/ 486 8mb mem 60 mb HD £2500 development £500+ runtime.

Coverage:
System 36 & AS400

Applications:
All system/ 36 & AS/400 RPG Apps Can migrate to these baby systems.

14 MANCOS

1 Crewe Road
Wythenshawe, Manchester M23 9BE
Tel 0161 946 0000 Fax 0161 945 3822

Company Description:
Maginus provides a unique platform from which distributors can install a fully functional and easy to use software solution. Maginus is is a Multi-Currency, Multi-Company, Multi-Lingual product with four key operational areas: Sales , Stock and Purchase Management with Financials Maginus integrates with EDI, Fax and EIS etc.

Hardware:
Open systems means we can integrate with most hardware inc HP&IBM.

Coverage:
Distribution management & FDs & IT. Managers & Directors.

Applications:
Distribution and logistics.

15 MASTER SOFTWARE

First Floor, 707 High Road,
North Finchley, London N12 0BT
Tel: 0181 446 2440 Fax: 0181 446 7370

Company Description:
Master Software specialises in fundraising software and has over 4,500 charity clients in Europe, Canada and the US. Fun-Master provides donor, prospect, gift and covenant data with detailed reporting functions, accounting, membership and prospect research available. FM light provides comprehensive donor management in a simple package perfect for small charities.

Hardware:
IBM PCs and compatibles, Novell networks.

Coverage:
Europe and North America.

Applications:
Software for charity/membership/fundraising organisations.

16 PEOPLESOFT UK LTD

The Atrium Court, Apex Plaza,
Reading Berkshire RG1 1AX
Tel: 01734 254254 Fax: 01734 511832

Company Description:
PeopleSoft - develops and markets PeopleSoft HRMS, PeopleSoft Distribution and People Tools, a powerful application development and customisation environment. PeopleSoft combines graphical user interface, relational database technology, and client/server architecture to deliver superior product functionality and technologically innovative applications, with the best customer service in the business.

Hardware:
IBM digital Hewlett Packard data. General SUN MCR.

Coverage:
Fortune 500 and Fortune 1000

Applications:
PeopleSoft financials. PeopleSoft hrms. - PeopleSoft Distribution

17 PLATINUM SOFTWARE UK LTD

85 London Wall, London EC2M 5ND
UNITED KINGDOM
Tel: 44 71 628 1250 Fax: 44 71 628 1255

Company Description:
Platinum is an industry leader in providing large-scale client/server financial systems to blue chip organisations around the world. Platinum financial applications can offer benefits such as; instant responses to requests for information, the flexibility to tailor the software to your business, a wide choice of reporting options, a full Windows Graphical User Interface and total integration with desktop applications

Hardware & Costs:
486 Intel based processer. Entry level prices.
FROM £20,000 TO £100,000

Coverage:
UK, Europe, United Stated, Australasia, Asia

Applications:
Financial Accounting and Management Information Software.

18 SYSTEMS UNION LIMITED

No. 1 Hammersmith Broadway
London W6 9DI
Tel: 0171 312 4545 Fax: 0171 312 4546

Company Description:
Sunsystems from Systems Union is an international windows based product offering a choice of client/server configurations for most hardware and database platforms. Incorporating powerful multi-currency and multi-company facilities and available in 20 languages, Sunsystems is installed at over 9,000 sites worldwide.

Hardware:
Most hardware platforms. Price on application.

Coverage:
Worldwide

Applications:
Financial management and manufacturing.

SunSystems

Systems Union

19 FMIS SYSTEMS LIMITED

Greenstede House, Station Road,
East Grinstead, Sussex RH19 1UZ
Tel (01342) 326000 Fax (01342) 326060

Company Description:
HDE for Windows provides IT Management with a comprehensive high performance, Help Desk and Resource Management System that addresses today's requirements for Distributed Systems Management. HDE includes a knowledge-based Help Desk, extensive problem management and change management capabilities and a comprehensive management information sub-system.

Hardware:
HDE is a PC based software system. Prices start at £9,000.00

Coverage:
HDE is sold in UK, Europe and USA.

Applications:
The management of Internal and External Help Desk environments.

20 KINROSS COMPUTER SYSTEMS LTD

Station House, South Street,
Milnathort, Tayside. KY 13 7XB
Tel: 01577 863995 Fax: 01577 864613

Company Description:
Help_IT is a help desk system designed for any organisation, where Quality & BS5750 are important, to manage their IT & other support operations. Help_IT provides comprehensive Call Management, automatic Call Routing, Problem & Solutions Database, Service Contracts, Inventory Management, full Monitoring and Escalation facilities plus a comprehensive Report Writer.

21 DUN & BRADSTREET SOFTWARE

Kings House, Bond Street,Bristols, BS1 3AE, UK
Tel: 0117 927 6866 Fax: 0117 925 7131

Company Description:
Dun & Bradstreet Software is a global provider of business software products, tools and services including decision support tools, financial, human resource, manufacturing and distribution. As a company of the Dun & Bradstreet Corporation. D&B Software has the financial stability and heritage of providing information to the business world for over 20 years and has over 10,000 customers in over 60 countries.

Hardware:
Price on application.
HP's HP-UN, DG's DG/UX, IBM RS/600 AIX, Sun Microsystem's Solaris.

Coverage:
Worldwide

Applications:
SmartStream Decision Support, Financial Stream, HR Stream, Manufacturing and Distribution Stream.

22 CEDAR DATA PLC

Oriel House, 52 Coombe Road,
New Malden, Surrey, KT3 4QB
Tel: 01819497057 Fax: 01819498723

Company Description:
The *cfacs* financial management system is a flexible, fully integrated modular systems able to provide up-to-date information across multiple users and sites. *cfacs* has been developed in ORACLE and comprises General, Purchase and Sales Ledgers; Fixed Assets, Time Recording, Purchase and Sales Order Processing; stock control and project an commitment accounting.

Hardware:
All major hardware manufacturers

Coverage:
UK and Europe

23 CIMAGE INTERNATIONAL LTD

Centennial Court, Easthampstead Road,
Bracknell, Berks, RG12 1JX
Tel 01344 860055 Fax 01344 861471

Company Description:
Cimage supplies information management solutions to petrochemical, Manufacturing & utility organisations worldwide. CIMAGE solutions manage Engineering & Manufacturing through commercial and project information. All the information required to support plant constructing certification and operation and product development, configuration support and manufacture.

Hardware:
CIMAGE solution support most industry standard platforms.

Coverage:
Worldwide

Applications:
Eng. change mgt, product devpt/mfr, plant ops/certifica, Reprogrfx.

24 HARRIER SOFTNET LIMITED

Unit 1a, Falcon Business Park, Ivanhoe Road,
Finchampstead, Berkshire RG11 4QQ
Tel: 01734 731181 Fax: 01734 734546
E-mail: sales@harrier.com WWW http://www.harrier.com

Company Description:
Harrier Softnet distribute open networking software products designed to provide interconectivity between dissimilar computer systems such as DEC VAX & Alpha, PC DOS, Windows & NT, UNIX and Novell Netware. The integration products that we supply and support utilise industry standard protocols such as TCP/IP, NFS and IPX/SPX, (they include TGV's MultiNet, MultiWare, Phase/IP and Secure/IP).

Hardware:
Harrier products link systems such as DEC VAX & Alpha, PC DOS, Windows & NT, UNIX and Novell Netware. Costs are available on request.

Coverage:
Harrier have offices in Berkshire and La Defense, Paris.

Applications:
Products allow dissemination of information from one proprietary system to another.

25 IMI COMPUTING LTD

Lion House, PO Box 1240 Witton
Birmingham B6 7UH
Tel: 01213568383 Fax: 0121356063

Company Description:
A specialist in the provision of innovative office automation. Document imaging and workflow solutions, particularly to the insurance, financial services and utilities markets. IMI's strong cross-platform networking and systems integration expertise provides clients with practical, cost-effective business solutions.

Coverage:
UK & Europe

Applications:
Office automation, document imaging and workflow.

26 INFERENCE CORPORATION

31-37 Windsor Road,
Slough Berks SL1 2EL
Tel: 0753 811855 Fax: 0783 811860

Company Description:
Inference Corporation is the leading supplier of software tools and consultancy services supporting the automation of the Front Office-delivering competitive advantages through customer-focused applications including helpdesks and call centres.
Inference's products and services are focused in three areas: Front Office application development tools; Customer Service and Help Desk application shells using case-based reasoning, and strategic systems consultancy.

Hardware:
Inference software runs on networked PCs supporting Windows, OS/2 on UNIX.

Coverage:
Worldwide

Applications:
Inference technology and services has provided solutions for Compaq, Argos,London Electricity, IBM, American Airlines, Ford, Swiss Bank Corporation and J Sainsbury.

27 ASHGOAL LIMITED

60 Cyprus Avenue,
London N3 1SR
Tel: 0181-346 1566 Fax: 0181-346 4098

Company Description:
Totall Manager the professional contact management system. Very easy to use while storing and handling large amounts of data. Includes: Marketing plans, Letters and Bulk mailings, Order processing, Diaries and Telemarketing. Ensuring full and effective sales and marketing campaigns.

Hardware:
PCs, XT, AT, 386, Portables.Lap tops, Notebooks

Coverage:
Worldwide - 15,000; UK - 320

28 FAXBACK LIMITED

Fairfield House, 24 High Street
Great Beckham, Surrey KT23 4AG
Tel 01372 450535 Fax 01372 450538

Company Description:
Automated fax response systems first developed at Intel. Callers from any touchtone phone proceed through a simple voice-prompted menu keying in numbers of documents requested plus their fax no. and the information is faxed immediately documents created from any Windows application. Can also transmit files. Call 24 hour demoline 01372 450535.

Hardware:
Software & cards for typical 4 line £8500 requires 486PC

Coverage:
Worldwide Blue Chip user list

Applications:
Unlimited brochures datasheets maps forms price lists etc.

29 SARATOGA SYSTEMS

Coworth Park House
Coworth Park
Ascot, Berkshire SL5 7SF

Company Description:
Saratoga Systems is a leading developer and supplier of account management and sales automation software across all industries. We offer solutions specific to each organisations requirements, without time consuming programming, resulting in a very high ROI. With more than 500 customers worldwide, the package has proven itself to be a very cost effective solution.

Hardware:
PCS 886/DOS, 386/Windows, UNIX, IGM/MVS £650 per user for 100 + users.

Coverage:
Worldwide multilingual

Applications:
Enterprises wide sales & Marketing management, sales-force automation.

30 SOFTA & CO LTD

11 London Road, St. Albans
Herts, AL1 1LA
Tel: 01727 863234 Fax: 01727 844154

Company Description:
As the leading sales & marketing systems consultancy, SOFTA builds flexible software solutions based on proven, best practice metnodologies. Services include: sales & marketing & business strategy consultancy & systems integration project services. Our service portfolio ensures the fastest route to the delivery of identified business benefits.

Hardware:
PC Architecture, Microsoft Windows, Windows NT, Client Server Databases.

Coverage:
UK & Europe

Applications:
Software components for all key sales & marketing processes.

31 SEARCH SOFTWARE AMERICA

23 Wood Lane,
Sonning Common, Reading RG4 9SJ
Tel: 01734 724472 Fax: 017344 724494

Company Description:
SSA-Names provides users with high-performance name search for person or company names, or addresses, in databases of 50,000 to 100 million records. Sophisticated algorithms compute name keys & search strategies which compensate for error & variation found in naming words. Intelligent scoring facilities provide human like record ranking and matching.

Hardware:
IBM, ICL; DEC, UNISYS, BULL, HP, SEQUENT, PYRAMID, WIN, NT, 0S2 & MORE.

Coverage:
UK, Europe, USA, Australia, Asia.

Applications:
Customer systems, Registers, Fraud and Credit Checking, Merge/

SOFTWARE MARKET REPLY SERVICE

Should you require further information on any or all of these advertisers, simply fill in the Coupon and return it to: Box FT-IT-2, Capacity House, 2-6 Rothsay Street, London SE1 4UD.

Name: ....

Company Name: ....

Position in Company: ....

Address: ....

....

Telephone Number: ....

	Tick		Tick
1. Exchequer Software Ltd	☐	17. Platinum Software UK Ltd	☐
2. JBA International	☐	18. Systems Union Ltd	☐
3. Select Software Tools	☐	19. FMIS Systems Ltd	☐
4. ICL Financial Services	☐	20. Kinross Computer Systems Ltd	☐
5. Object Management Ltd	☐	21. Dun & Bradstreet Software	☐
6. Movex (UK) Ltd	☐	22. Cedar Data Plc	☐
7. Boole & Babbage Europe	☐	23. Cimage International Ltd	☐
8. Kinross Computer Systems Ltd	☐	24. Harrier Softnet Ltd	☐
9. Delrina (UK) Corp Ltd	☐	25. IMI Computing Ltd	☐
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11. Business Simulations Ltd	☐	27. Ashgoal Ltd	☐
12. Diagram Systems Ltd	☐	28. Faxback Ltd	☐
13. California Software Int Ltd	☐	29. Saratoga Systems	☐
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16. Peoplesoft UK Ltd	☐		

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IT update

FT survey available on the Internet

The latest Financial Times survey on Poland is now available on the Internet, the world's largest computer network. The 24,000-word survey is thus available to a potential audience of 40m 'Net surfers,' including thousands of companies which plug in to the Internet each month, *writes Michael Wiltshire.*

Key business information on eastern Europe's emerging markets is collected by Internet Securities, via its offices in London, Pittsburg, Warsaw and - soon - in Moscow. This information, including the FT's 12-page Poland survey (originally published on March 28), is then distributed via Internet.

The range of services from Internet Securites includes news and translations from leading business papers, company financial statements, reports by industry analysts, consultants and brokers, plus prospectus details of companies about to be privatised in eastern Europe.

The company can be reached on Internet address *http://www.securities.com* or by phone in the UK on +44(0) 171 570 0057 or in the US on 1 412 688 9388; or in Poland on 48 2 630 60460.

Mammoth task to create multimedia database

Britain's Natural History Museum, which houses 68m natural objects and specimens - is transferring data from thousands of manual ledgers and card files on to a multimedia database. Selections of this data will soon be available to scientists around the world via the Internet.

The museum houses the largest biological research institute in the UK, employing more than 800 staff, with an annual budget of £30m.

The museum is using an integrated 'collections management system' for its Life Sciences Department which holds 40m specimens and receives 2m new items a year. The database is being created on systems from Borland, the software services company, using 'Paradox for Windows' and the its InterBase relational database management system.

The Natural History Museum's deinonychus

Outsourcing deal worth up to £1bn

The proposed outsourcing and acquisitions deal - worth up to £1bn in fees over ten years - between Lucas Industries, the engineering group, and Electronic Data Systems, the international computing services company, would make EDS the largest supplier of IT services in the UK.

The provision of IT services for Lucas by EDS is expected to be worth around £500m over ten years with a further £500m of revenue to EDS coming over the same period from the proposed acquisition of Lucas Engineering and Systems, LE&S, a management consulting operation, based in the West Midlands; and Lucas Management Systems, LMS, based in Slough.

The deal would mean 1,200 IT staff from Lucas would join more than 5,000 employees of EDS in the UK. LMS would continue to operate as a specialist unit.

Lucas, which specialises in automotive and aerospace engineering, is the latest in a line of large organisations, including Xerox and the Inland Revenue, to use EDS services: Mr Tom Butler, managing director of EDS UK, says: "In the manufacturing sector, we've been working with General Motors for over ten years. Our experience in implementing common working processes for a global operation was instrumental in persuading Lucas that we could meet their requirements.

"In addition, we see LMS and LE&S providing a 'natural fit' with EDS, helping us to develop further our consulting operations."

EDS, founded in the US in 1962, and bought by General Motors in 1984, has more than 75,000 staff in 36 countries. Its revenues last year were a record $10.05bn, compared with $8.56bn in the previous year.

Growing importance of electronic data interchange

The UK leads the way in Europe with applications for electronic data interchange - EDI - the technology for sending and receiving electronic messages to improve the turnaround time in business deals and "just-in-time" delivery systems. In particular, EDI has increasing applications among suppliers in the retail sector.

The European market for EDI, which stood at $326.7m in 1993 is expected to increase to $661.9m in 1997, according to analysts at Frost and Sullivan. The easing of trade barriers plus savings in administration are expected to boost the EDI market by 19 per cent annually over the next five years. However, EDI within governments throughout Europe has faced setbacks because of inconsistent computerisation within local and national departments.

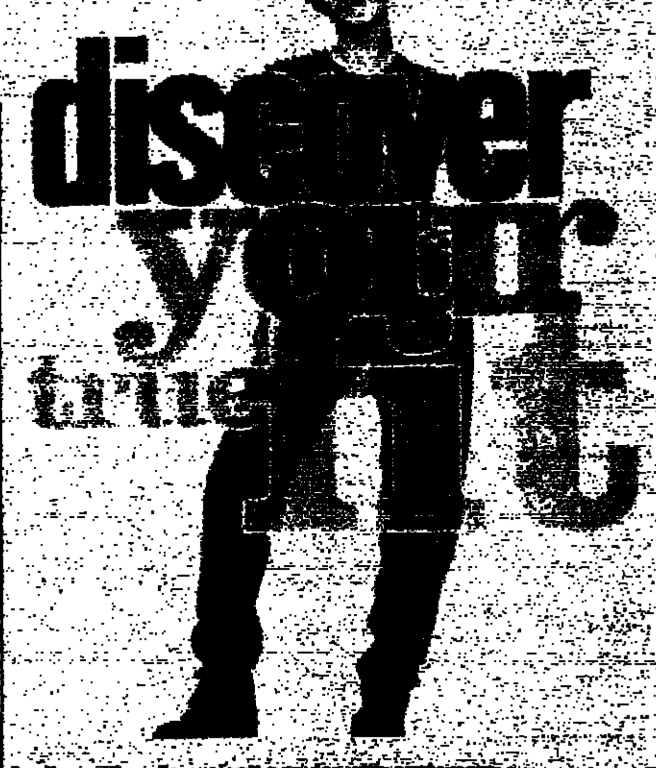
Levi's new multimedia 'jean machine'

In the first multimedia project of its kind, customers calling in to Levi's 'flagship' store in London's Regent Street can select jeans via an interactive computer screen which presents them with a range of 20 styles, hundreds of size variants and a choice of 87 colours.

The 'fit centre' uses an advanced Macintosh computer touch-screen which features models wearing styles ranging from slim, regular, loose and super-loose. The multimedia system brings together animation, music and video to amplify Levi's brand awareness.

"The feedback from customers is very positive," says Peter Warren of Tui, the London-based multimedia development company. Similar projects may be tried at other European retail outlets.

Images by Silicon Graphics



Levi's multimedia project popular with customers

'Virtual scenery' created on computers

As film and TV audiences, plus video game players expect increasingly sophisticated 'special effects,' computer companies are racing to introduce new services for the digital entertainment market.

Pictured left, for example is a scene developed on a high-performance Silicon Graphics workstation for a new production by the Rocket Science Games company.

Virtual Real Estate, a company producing computer-generated fantasy backgrounds, is now converting the BBC's scenery catalogue in to three-dimensional computerised models. This facility allows set designers to try out many different designs on screen, without having to build a set first.

Virtual Real Estate was set up by Robert Harris, a leading scenic designer and founder of the Travelling Matte Company which specialises in creating scenery on Silicon Graphics computers.

DHL signs $3.6m software deal

DHL Worldwide Express, the international document and parcel carrier, has selected Uniface software from Compuware, a leading provider of software solutions, for a large-scale redevelopment of DHL's central business applications which include billing, parcel tracking and tracing, customer services, sales and marketing.

The deal, worth $3.6m, includes more than $900,000 worth of on-site consultancy and training.

DHL operates in 217 countries and handles more than 80m air packages a year.

IT update

CeBIT'95 HANNOVER

CeBIT'95, the eight-day European exhibition for information and communication technologies, broke all records with more than 750,000 visitors attracted to Hannover by 6,167 exhibitors from 59 countries.

In a survey among exhibitors after the event, sales expectations reportedly rose again, with more than 77 per cent of companies describing the response as "favourable."

Highlights of the March show included multifunctional hardware, combining communications and information technology; and network technology, with a focus on the Internet, the world's largest network. The software sector was dominated by products for the 'work group' and 'work flow' management sectors.

The event attracted 481,000 visitors with decision-making authority as regards purchases - an increase of 55,000 over the previous year. The US led the way with the highest number of exhibitors (478), followed by Taiwan (289), the UK (266) and France (107).

Nearly 90 per cent of exhibitors have said they intend to return for next year's shorter, seven-day show, planned for Thursday, March 14 to Wednesday, March 20, 1996.

Bank's video expansion

The Royal Bank of Scotland, which has been using studio-based videoconferencing for 10 years, now has plans to expand its desktop video-network with trials of the new 'Presence' videophone system, which British Telecom developed with Panasonic, the electronics groups.

The bank already carries out 2,500 video meetings a year using its studios in London, Manchester and Edinburgh. Each site is equipped with BT's VC5000 high quality videoconferencing systems designed for large groups of people. These facilities can be linked by satellite to sister companies in the US and Spain - Citizen Bank in New England and Banco Santander in Madrid.

The new 'Presence' videophone, costing £2,500, has full-motion, full-colour video facilities and is designed for senior executives who do not use a PC on a day-to-day basis, but require the added advantage of visual communications for everyday business.

The world market for videoconferencing systems is estimated to be $500m a year and growing rapidly. BT, which is investing heavily in visual services, expects the world market in this sector to exceed $3bn in the next three years.

Geography is no barrier

Regardless of location, manufacturers and suppliers can work together on screen, using Syntegra's 'co-operative engineering' system, which allows digital design information to be read, shared and amended electronically around the world.

Sharing information increases the 'right first time' factor in engineering projects, thus reducing time-to-market and cutting costs. Syntegra is the systems integration (SI) business of British Telecom.

SI 'glues together' the distributed technology processes, enabling independent businesses to co-operate effectively.

New ways to detect fraudulent credit applications

A new computerised risk assessment system to detect fraud in credit applications is able to identify discrepancies between current and previous applications by the same person - and, just as important, to cross-check information on other credit applications.

Industry statistics indicate that fraud costs the UK finance industry £2.7bn a year, with an estimated six per cent of new applications for credit containing an element of deception, often hard to identify.

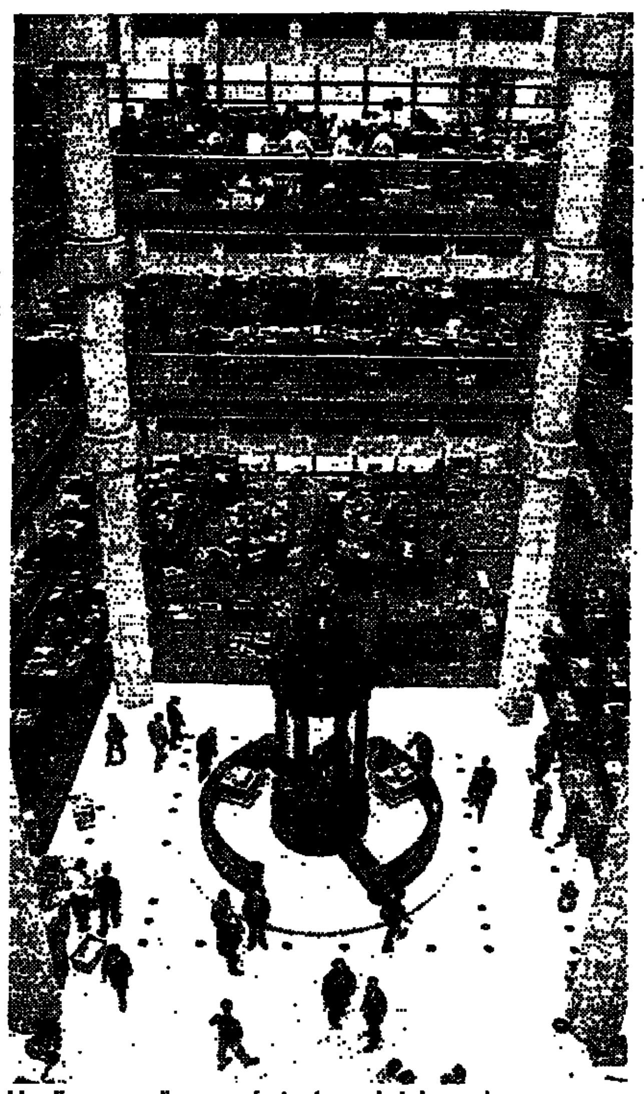
The new 'Detect' system has been developed by the international CCN Group and a consortium of financial institutions including Nationwide Building Society, GE Capital and Lombard Tricity Finance. The CCN credit database holds more than 250m records with 66m names and addresses, along with details of 2.7m companies.

The 'Detect' system "re-introduces an element of subjectivity" by identifying discrepancies between various credit applications, explains Tony Leach, sales director of CCN Credit Systems in Nottingham. For example, it will :

- Identify an applicant failing to reveal an address occupied between those listed on the form.
- Recognise a home phone number quoted, say three hours earlier, as a work number by a person with a different name.
- Spot contradictions in answers over 'time with bank'
- Check address data with that given on the Voters' Register.
- Reveal if a bank account number quoted on a previous application was used by a different person at a different address.

Credit applicants who make a genuine error will benefit from Detect's ability to refer apparent discrepancies to an operator and thus avoid delays.

Advanced software developments at Lloyd's of London



Lloyd's: responding even faster to market demands

Lloyd's of London, the insurance market, has chosen advanced object-oriented (O-O) software techniques to build its next generation of system applications. This development will add to Lloyd's competitive advantage by allowing it to respond to market demands more quickly.

Key market operations at Lloyd's will be supported by systems produced with 'Software through Pictures,' an O-O modelling tool from Interactive Development Environments, IDE. This software enables Lloyd's to design its strategic applications for re-use, as the development team creates a library of software 'objects' which reflect how the market operates. The ability to re-use software 'objects,' rather than rewrite the same software, will support the insurance market's smooth operation where there are many individual companies doing the same kinds of business.

IDE has more than 12,000 software users in 25 countries.

Michael Wiltshire

Prizes worth £20,000 for software designers

Prizes of cash, hardware and software, valued together at £20,000 are once more offered to winning student software designers in the 'Business Software Challenge '90s' - launched today for its fifth year.

This national design competition recognises and rewards student designers - and recent graduates - while demonstrating to the business community the quality and range of software design talent at higher education institutions in the UK.

The competition, sponsored by Computer Associates, the business software supplier, and ICL, the IT systems company, is run in association with the Financial Times Review of Information Technology.

Winning entries in the last four years have includes a design for a small hotel system, a mathematical modelling package for non-specialists, a system for helping in the medical care of patients with heart problems, and a package to help evaluate the risks in new mining projects.

Entries may be submitted by individuals or teams. This year the sponsors are inviting suggestions from students, academics, business people and professional organisations from anywhere in the world for ways in which similar initiatives in software design could be run in their own markets.

The competition is supported by the British Computer Society, the Institute of Management, Coopers & Lybrand, the Worshipful Company of Information Technologists and the Conference of Professors and Heads of Computing.

The closing date for entries is September 1,1995. For further information on the competition, write for details and entry forms, from:

The Competition Secretary
Business Software Challenge 90's
7 Bayley Street,
London WC1B 3HB

Tel: 0171 636 7366
Fax 0171 636 7876
E-mail (Compuserve): 100566,3506

■ **Staff training – Attitudes are changing, says Michael Dempsey**

Management takes a positive view

An emerging vogue in PC training dispenses with human teachers altogether, but competent classroom trainers clearly have a secure future

Training has made the breakthrough in terms of management consciousness. It is established as 'A Good Thing' – and as PCs running formidable packages of software have appeared on the desk of every employee, so computer training courses have achieved the happy status of 'A Very Good Thing' in most organisations.

There is, however, a drawback to this positive reaction to training schemes. Far too many companies fail to think through the purpose of giving individual staff a firm grounding in one program or system. Despatching dozens of people to attend standard courses on one product can cost an employer thousands of pounds and yield very little other than a certificate that pleases individual employees.

Computer spreadsheets are a vivid example of this approach. In a large company, every spreadsheet user is in touch with the same central accounting system. But at the desktop level these staff all employ the spreadsheet on their PC for different tasks. How does a company reconcile the rational desire to exploit an IT investment to the full while avoiding indiscriminate spending on training? Tessa Dash is joint proprietor of Dash & Kane, a London-based consultancy that specialises in teaching small groups of people to use popular PC software.

The consultancy prides itself on a pragmatic approach – "people use no more than 20 per cent of the capability of their software packages. So there is no point teaching them things they won't use," says Ms Dash. She believes that effective training begins before the students are sitting down in front of a computer screen. "Anyone can, for example, click on the mouse here or there. We try to avoid 'spouting software'. We sit down with the client and try to identify what their employee needs to use."

PC training has to make sense in terms of the organisation's overall objectives, so a shrewd trainer will take time to grasp the company's structure – "the real benefit comes from a trainer who understands how departments fit together – and a smart manager uses the course to get more out of each employee."

The consultancy charges up to £400 for groups of four, with clients such as conglomerate RTZ and stints working for the British Council as far afield as the Yemen to its credit. It recognises that a lot of training time is wasted because staff have ignored basic requirements. If a trainee is unfamiliar with a mouse it makes sense to sort out inhibitions before the course starts.

Consultants recommend that novice mouse-users should play a computer game for one hour every morning the week before training.

James Gibb, head of information management training at Shell International, the oil group, agrees that a high proportion of desktop software is never used.

"I'd be surprised if more than 30 per cent of functionality is accessed in most packages," he says. "Your average user doesn't need that much."

Shell uses external trainers for basic PC training, and recruits these specialists locally. For more strategic training, involving IT planning, the company organises courses centrally and sells the facility to regional managements – "these are functions that must be performed in a consistent way right across the globe," says Mr Gibb.

With 220 permanent staff and a pool of freelance trainers, Peritas is the largest independent computer training organisation in Britain. The £24m turnover operation is entirely owned by ICL, but offers courses in programs from most leading suppliers.

Mr Paul Butler, manager of information systems technology at Peritas, says that the emerging vogue in PC training dispenses with human teachers altogether. Multimedia technology, the merging of voice and video images with data on a PC screen, promises to guide the pupil through every keystroke of a program without the expense of a trainer or the need for a classroom.

"We are planning a significant growth in multimedia business," says Mr Butler. Some clients are strongly attracted to the multimedia approach: training transferred to a CD-Rom disk, packed into a multimedia-capable PC, allows cartoon characters and the voices of actors to intervene in the humdrum world of the accounts program.

The Scottish Prison Service is introducing an information network to its 4,500 officers using a Peritas multimedia package – "it lets people learn at their own pace and they can avoid the rather tedious nature of formal classrooms," says Brian Sutherland, the Prison Service project manager.

Broadcast Media is a film company that diversified into the multimedia business. From the company's Sussex headquarters, Mr Rod Hotham, marketing manager, is engaged in a campaign to supplant traditional training methods.

"Multimedia offers the ability to put your best tutor in front of any number of trainees all the time. It cuts costs because you only need one recording, instead of paying trainers all the time. And it reduces pressure on the trainee, letting them learn at their own pace."

Unfortunately this argument was heard a decade ago, when Computer-Based Training (CBT) was pushed hard by large organisations such as the former Control Data, then a large hardware supplier.

The concept floundered because technology in the mid-1980s could not address the complexity of the human learning process. Today's systems are far more practical as aids to training – help functions have become more practical.

But no computer-based training scheme will cover every question – and without swift answers, the student becomes frustrated. The cost of designing a multimedia presentation tailored for one department means that this type of training demands a large number of trainees to be cost-effective. The competent classroom trainer has a secure future until programs can be written for every individual user. That day is still a long way off.

IT directions

Teleworking buzzwords

- **Teleworking**, variously known as **telecommuting**, and **remote working**, is IT-supported 'distance working' that makes extensive use of telematics – telephones, fax machines, electronic mail, and so on. The person undertaking the work does so at a physical distance from the person or organisation employing him or her, either full-time or part-time, often on contract. In British Telecom's definition, teleworkers generally process electronic information for a remote client, with results communicated to the employer by a telecommunications link.
- **Distance group working** or **tele-cooperation** enables interactive consultation, as in **telesecretariats**, **telemaintenance**, and **telemedicine**. (In Scotland, remote areas are experimenting with the use of video-links between consultants and other medical experts and their remote patients).
- **Hot-desking** is the use of one desk (and its technology) by a succession of different workers. The employer provides a desk in permanent premises: the territory does not belong to any one individual worker, but is used by any one of a group of people who goes into the premises occasionally.
- **A nomadic desk** is a work location obtainable by remote access (often via a laptop computer) from wherever the worker happens to be.
- **The telecottage** is a local centre, open to anyone who needs the service, providing PC, printer, fax, telephone and other equipment. Funding comes from various sources, local and national, and can even come from large corporations whose 'outworkers' *(see outsourcing)* use the facilities.
- **Outsourcing** – a fashionable expression describing the use of outside, possibly remote, services to replace those of in-house employees. In this organisational model 'core' workers who are responsible for key activities buy in outside resources as and when they need them from peripheral resources (such as consultants) or other 'outworkers.'
- **ISDN** – Integrated Services Digital Networking allows for high-speed data transmission on lines that can accommodate voice, image, computer data, video and graphics, videoconferencing and image transmission. For the home or office user, a single pair of wires can serve phone, fax modem, all on the same line, with incoming call differentiation, calling line identity, and connection within milliseconds.
- **CTI/CIT** is computer telephony integration, the combination of computer-based information with telephone services. Typical applications are telesales and customer services (where an incoming call automatically summons the associated customer record to the operator's screen). The arrival of voice technology has further broadened the scope.
- **Telexecutive** – a word, originated by Francis Kinsman, and used to describe a highly qualified worker, probably part-time, whose flexible working pattern might involve hot desking, homeworking and telecentre working.
- **Corporate telecommuting** provides a formal framework for an organisation's professional employees to work at home.

– CLAIRE GOODING

'Remote' working - The US leads the world in applying IT-supported 'distance working', reports **Claire Gooding**

The ups and downs of teleworking

There's no place like home, wherever it may be, but keep me in work, says the 'virtual employee'

The next time you pay for a packet of pasta – or any other manufactured product – reflect on this: you are mostly paying not for flour and egg, but for the information required to deliver it in that form, and to give instructions on how to cook it.

This 'knowledge content' has a direct link with the growth of teleworking. People no longer have to be located under one roof to contribute to a product or service. They can do so from home in premises which come cost-free for the employer.

"Research in Europe has shown that as much of 80 per cent of what the consumer pays for consists of information-based 'added value': design, packaging, advertising, distribution, management, and so on," says Ian Culpin, a consultant to the European Community. "In theory, many of those jobs involving information could be done anywhere where the right skills exist."

Mr Culpin sees teleworking as capable of making a great contribution to economic growth in a global marketplace where distance is no object.

"In Europe, more than 70 per cent of turnover is created by small and medium-sized enterprises – SMEs – whose average size is seven people. Even half a job per company [for a teleworker] would make a dent in the unemployment figures. If there is a way to use the information society to create jobs, then we have to adopt a far more positive attitude to the potential," he says.

Currently, telework penetration overall is estimated at 5 per cent in European organisations, (the larger the company, the greater the adoption of telework), with around 1.25m teleworkers in all.

Scandinavia and the UK have already been enthusiastic in the adoption of teleworking, and have used the arrival of ISDN lines *(see buzzwords panel, left)* to start projects in rural areas. The Telework '94 initiative, launched by the EC (Directorate B), put the UK top of the league table for the number of teleworkers (45 per cent of the total) with France, Spain and Germany following – *see table, below.*

An EC report, *New ways to work in the virtual European company, March 1995*, identifies three other factors in the growth of teleworking, apart from the knowledge-content of products. They are the convergence of computing and telecommunications, the economic pressures to 'outsource', and the need for more autonomy within organisations.

Teleworking is itself likely to be the main source of demand for ISDN connections in the year 2000, according to a report by the consultancy Ovum for the EC. The US is already well ahead of Europe, as a result of its the adoption of ISDN, and the provision of POP – Point of Presence local-cost calls.

Bell Atlantic, for example, provides ISDN via dial-up control-points which are much less costly than a dedicated line, which can be £400 to install, and £84 per quarter to rent in the UK. In the US, Internet service providers and home workers are seen as the main drivers of ISDN.

If Europe is to catch up, further deregulation of the telecommunications industry, introducing new competition to established providers, is seen as a necessity by many experts.

Yet, although teleworking can clearly make an important contribution to economic growth and employment, trade unions in Europe are worried that the move to part-time, self-employed contract labour, as a route to cost-cutting, will also enable companies to bypass traditional labour laws.

Self-employed teleworkers can be second-class citizens, compared to employees. Contract labour is cheap: no insurance contributions to pay, no premises, no equipment to buy, no pension, no benefits, no responsibility for health and safety, no long-term commitment. Every manager's two worst headaches, premises and people, are at a stroke distanced – literally – from the profit equation.

"The executive level managers will always be in-house, and teleworkers will never be as highly valued as in-house employees: they're unlikely to get to the top. They are an expendable 'buffer,' a disposable human resource," claims Gustave Jaeger, market research analyst with Frost & Sullivan in Brussels.

"On the positive side, teleworking helps [to reduce] unemployment, but on the negative side, it introduces cheap labour from the other side of the world." Telework from Europe, he points out, does not necessarily stay in Europe. "India has good English-speaking manpower and is technically educated. The US is using Indian skills remotely. Telework can also go to Malaysia and the Philippines, China, or elsewhere as long as the technology and skills are in place."

Some EU companies are already exploiting the wage gap between Europe and the rest of the world by contracting out data processing – and even software development – to India, eastern Europe, India, and the Pacific Rim.

In telework's favour, employees themselves appear to be in favour of flexible working. And, as social trends adjust to an SME-based economy, the technology is the smallest problem to be resolved. All young employees expect a PC as a matter of course, notes the IT research company Spikes Cavell, in its UK report *The Coming of the Third Age*, commissioned by mobile PC manufacturer Zenith. Increasingly, what they are not expecting is a job for life.

In most countries, however, the social system is still geared to a society where a person sits at the same desk for 40 years and then draws a pension. Governments need to make changes which recognise that a worker of the 21st century is less likely to be an employee. Only then will a balance likely to be achieved between all the competing interests involved in teleworking.

In Sweden, Digital Equipment has a 'hot desking' centre built for flexible working, and has adapted its premises for the purpose. The desks disappear into the ceiling when not in use: a good physical metaphor, perhaps, for the virtual employee.

In real life, however, he or she will increasingly want their needs at least to be visible at all times and their rewards to be commensurate with their efforts.

- ☐ *Telework 95: an EC report: tel (Belgium) + 32 2 295 90 54*
- ☐ *'The Virtual Office: Reality of the Future,' Dataquest Europe; UK tel: +1494 422722.*
- ☐ *'Lan Interconnection via ISDN,' final report to the European Commission, September 1994; Ovum: tel +171 255 2670.*
- ☐ *'The New Age of Teleworking,' from Envisage; UK: tel Mrs M Holland, +1438 717155.*
- ☐ *'The Third Age of Computing,' Spikes Cavell/Zenith; March 1995, UK tel Louise Denny, +181 479 2228.*
- ☐ *Unisys' Intouch survey: tel Peter Burke, UK tel +908 212000*

Companies with remotely located workers by country

	France	Germany	UK
Have remotely located workers	32.6 per cent	31 per cent	51.5 per cent
Have no remotely located workers	67.4 per cent	69 per cent	48.5 per cent

Source: Dataquest report – The Evolution Towards Enterprise-Wide Networking

CASE STUDY Digital's 'hot desking' system

The system that follows you everywhere

There's a steady buzz of voices in Digital's open-plan office in the Crescent, Basingstoke. People come and go, leaving the desk clear, and taking care to 'log-off' the terminal or personal computer.

This is a hot-desking office, where staff have only a cubby-hole for possessions, a temporary mooring but no permanent berth, *writes Claire Gooding.*

For Digital employees, the only permanent feature is their telephone number, which follows them everywhere, thanks to a system called Pam – or Phone Access to Mail.

Pam re-routes calls so that users can program their personal computer, laptop or mobile phone, to become their own extension, to which all incoming calls are then relayed. The system enables them to receive calls, have them referred by their secretary, or re-routed to wherever they want.

Calls can be directed via Digital's Virtual Private Network at a fraction of the usual cost, whether the person is at home, or in a hotel room anywhere in the world. The system can manage most input, including electronic mail, screen-based text, and faxes, all of which can be synthesised into voice-messages.

A neat feature is the ability to pick up voice-messages, using the telephone itself to replay the sound.

"We were looking for a solution as simple as possible, so that people could use whatever technology was to hand," says Dave Gillies, consultant and flexible worker.

"The telephone handset was the lowest common denominator. For salespeople on the road, it's ideal, as they can use the time in the car to listen to their messages and reply to them, on the mobile phone. The beauty of it to my customer is that I have one number, which reaches me even if I'm in a hotel room in Oslo."

In Digital Equipment's specially adapted 'hot-desk' office in Sweden, the desks disappear into the ceiling when not in use

The system enables each secretary to manage 20 or so people – everyone has an electronic diary noting their movements for the day. Pam manages all the routeing transparently. Callers cannot tell that the secretary – to whom they speak first – might be in Basingstoke or Reading, while their real quarry might be working at home in Welwyn Garden City, such as Stephen Jupp, principal consultant and flexible working manager at Digital.

Mr Jupp works an average of three days weekly at home, advising Digital clients on the implementation of flexible working in general, and Pam, now a product in its own right, in particular.

From her home in Digswell, near Welwyn, Sue Barber administers Digital's Systems Integration Service Centre and is also secretary to its manager.

"Some people find it odd that I don't sit outside the manager's door. But with the electronic diary I can see at a glance where people are likely to be."

She uses a telephone with a button which gives direct access to Digital's network. The main part of her job is in keeping track of the 112 staff and their workload – information that takes time to consolidate, without interruptions.

"That's what I like best: the phone rings but there are no other distractions," she adds. "But I have to force myself to take breaks, and one thing that's emerged is that I'm not getting enough exercise."

North American telecommuting - human costs have become apparent, reports **Geoffrey Wheelwright in Vancouver**

Not always a smooth road

Working at home may sound idyllic, especially to those who face a long daily commute to work. Yet in North America where many large corporations and government departments have adopted telecommuting schemes, the human costs have also become apparent.

For many workers who have spent their lives in corporate environments, it is difficult to adjust to working at home. While technology makes it possible to perform information-based jobs almost anywhere, not everyone is suited to telecommuting.

The road to happy telecommuting is not always smooth, says Ben Rosen, chairman of Compaq Computer. Over the past two years, the PC manufacturer has moved to a home-based model for much of its North American field-based sales force as it cut hundreds of staff jobs in the US and eliminated expensive leases on regional sales offices.

He acknowledges that there were some problems with this move and that not everyone was able to adjust to working from home. Some ended up being redeployed in the company – or leaving the organisation altogether.

An in-depth study of the impact of telecommuting is under way at Xerox Canada, which is using its British Columbia operations as a test-bed for a complete international revamp of Xerox operations that makes heavy use of telecommuting.

"Forty per cent of our employees now work from home," explains Dennis Finnegan, vice-president of the recently-established Xerox Customer Business Unit in BC. "So we are in the process of rolling out laptops and CD-ROMs for product manuals and information to service reps – which will allow them to do service calls and co-ordinate their activities from their home offices."

Xerox has had to put in place a number of training programmes and support schemes to help employees adjust, he says – "one of the key deliverables from a personnel development point of view is to develop skills, knowledge and competency levels for all field positions.

"As to the whole issue of personal development and growth – and the impact of all of those changes on hierarchy – we are in the midst of determining [the impact]."

Mr Finnegan advises any company planning to adopt telecommuting to become more attuned to individual employee's circumstances – and that means throwing away many old ideas about 'cookie-cutter' jobs and contracts – "we write a new contract for each employee," he explains.

Xerox also has realised that this individual approach means allowing some users to telework from places other than their home. Finnegan tells the story of one sales rep in northern British Columbia who found that he could not work at home because his wife ran a daycare programme for pre-schoolers which proved too much of a distraction. The solution was to provide the employee with office space at a local service bureau that he could use as a 'virtual office' when needed – without the cost of a full-blown regional office, support staff and office leases.

He says the company has also become aware of the issues that can be raised when a spouse who has always left for work each day is suddenly at home all the time. Children want to play – because they are only used to having this parent at home when they are not working – and spouses can become frustrated at having to change their routines to accommodate another person being around all day.

"Telecommuting should not have a negative impact on the quality of life and family situation. You need to tailor the definition of work at home," Finnegan says. "I think that's one of the obligations you have to undertake as an employer."

The infrastructure of the employer's organisation also has to change to properly support teleworkers.

"You have to ensure that you have the systems infrastructure in place so teleworkers have access to the data and information they need to do their work," he says.

While it takes self-discipline on the part of employees to make telecommuting a success, employers must also recognise that their teleworkers are not always on the job, even if they are in their place of work.

Mr Finnegan rejects the idea put forward by some social commentators that working from home means that employers can call on their employees at any hour of the day or night – "when the customers are closed, our sales reps and service force is off duty."

But of course, if a customer has a problem, he or she always knows where to find help.

صكرا من الاصل

■ Rural telecentre – Competing for business from urban areas – report by Claire Gooding

At the heart of the telecommunity

Project aims to create jobs and offer users top class services

One of the fledgling experiments of the information society is on the threshold of independence in the UK: The Kington Connected Community (KC3) was a project set up in 1993 to energise an entire community by means of technology – a sort of intensive prototype for teleworking. Kington is a small town in Herefordshire, selected as a typical model in terms of its economy, particularly rural unemployment. The KC3 project was initially funded through British Telecom, the Rural Development Commission, the Department of Trade and Industry and Apple Computer, which provided much of the equipment.

All funding runs out at the end of the year, and 18 months down the line, what was envisaged as an open-ended experiment is becoming a self-supporting organisation.

"Success has to be seen as becoming self-financing viable company, and we're close to being that," explains Dominic Bourton, the telecentre operation manager. He is now doing a corporate review and and a new business plan. "In a rural area, our overheads are much lower than urban areas. Through the level of technology we have, the quality of work we deliver is top quality – as good as you'd get anywhere. Moreover, the speed of delivery is as quick as you'd get anywhere, but my prices are incredibly competitive."

Mr Bourton, like any small business manager, is looking for new business – "my main commercial contracts vary considerably from software development to marketing initiatives, including direct marketing, and database entry (data capture). The centre has taken over payroll, personnel, and general office administration, all of which can be done remotely," he says. Well over half of KC3's turnover originates outside the area, typical work being a large data-entry contract for a Hampshire computer-services company.

"I'm in the business of creating real jobs and opportunities. I want to open up new avenues, new opportunities for employment, for kids when they leave school and people who would otherwise be long-term unemployed," he says."

According to Mr Bourton, the centre is only a shop window for the project as a whole – it gives people a focal point for what is effectively a virtual company – "my main problem is getting it across to employers that they can reduce their costs by planning ahead and using a service like ours. Forget the picturesque idea of roses round the door and pot-bellied pigs in the orchard. I'm talking about outworkers and contracting out, making businesses more efficient."

■ Teleproducts – an introduction for the teleworker

Equipment: users are spoiled for choice

Whatever computer kit you choose, it will soon be out of date, warns Claire Gooding

Technology, say the experts, should be no problem for the teleworker these days. If anything, there is *too much* choice, and an increasing number of suppliers are targeting the SoHo (small office/home office) market with tailored products.

The following list is a sample of a few products launched recently with teleworking in mind.

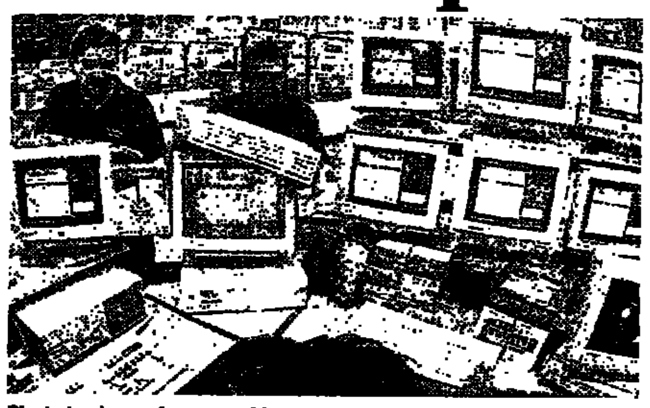
☐ **Hardware.** Compaq, the computer manufacturer, offers an excellent 'no-nonsense guide to buying a computer' which explains all common terms and jargon. (Compaq is currently running a London-based test project for home workers and has co-operated with Rice Homes to build an estate of ready-networked homes in Ashford, Kent). Details from Compaq, on telephone 0181 332 3000.

NEC, the computer notebook manufacturer, launched a Pentium-based range, the Versa P series in October 1994, with 'plug and play' monitors for home-based working, plus a range of easy-to-use windows-driven laser printers, SuperScript, which includes photo-realistic colour printing for SoHo design agencies and photo shops, priced at under £1,000. NEC Peripherals: tel 0181 993 8111.

☐ **Communications.** The data communications company, Pace Micro Communications of Shipley offers the Linnet Message Desk – a desktop modem which enables users to send and receive faxes, email and data files, and operate a full voice mail system from a desktop computer. Details from Pace on 01274 532.000.

Racal Datacom, part of the communications company Racal Electronics, chose the *CeBit* exhibition in Hanover last month to launch its DAP-4005 terminal adaptor to enable teleworkers to transfer large files and make remote connections from low-cost equipment, as well as an ISDN connector, the DAP 4200, to connect existing fax machines, modems and other existing analogue equipment over ISDN lines. Racal Datacom: tel 01734 669 969.

XcelleNet, the communications company of High Wycombe, offers a complete package for the 'disenfranchised' home-worker: one who only need*s* occasional connection to networks, and therefore needs some nursing and guidance through the connection. Xcellenet: tel. 01494 558000.



Plenty to choose from – a wide range of personal computers and software at PC World in Brentford, Middlesex

☐ **Services.** The Virtual Office in central London has a service for everyone from the sole trader to the corporate group: it consists of a single number that follows a person around, plus a personalised message service and secretarial and office services, from as little as £50 monthly. Virtual Office tel. 0171 917 2917.

Home Run is a subscription magazine, advising on equipment, running costs and efficiency, run by husband-and-wife team Andrew and Sophie James. They also test equipment and offer fact sheets on starting and running home-based businesses. *Home Run*: tel. 0181 846 9244.

☐ **Connectivity.** Unisys, the computer services company, launched its InTouch network service to integrate mobile workers into corporate networks. Unisys: Tel 0181 453 5250.

Tertio, the networking and telephony specialist, launched its TACT computer telephony product late in 1994, to automate routine tasks, especially those that can be performed remotely. Tertio can be contacted on 0171 336 7273.

The connectivity company TeleAdapt launched its Standard Connection products in February 1995, for connecting to the office via a PC from any specified non-UK country. TeleAdapt: tel. 0181 421 4444.

Network systems integrator Jaguar Communications supplies its Digidial range of ISDN products for teleworking companies, including LAN bridges, routers, and terminal adaptors. Jaguar: tel 01734 303681.

KNX, the ISDN and remote access specialist, this year launched its KNX-IS Primary Rate Access Server which can allocate ISDN connections up to 30 different locations. KNX Tel: 01943 467 007.

The report *The New Age of Teleworking* from Envisage outlines a minimum 'Simple Home Office' as consisting of PC, modem, fax-switch, telephone, answering machine, fax, and printer. There is an immense choice of PCs and software, as evidenced by any number of helpful monthly and weekly publications.

The exact combination of products depends on the nature of the job. Cost tends to force a compromise.

If space is at a premium, laptop computers are worth considering, although they tend to be less comfortable to use all day and every day because of the size of the screen, and in some cases, a cramped keyboard. Multi-purpose small-footprint peripherals, such as the fax/phone/copier/scanner machines now available from Oki, Canon and Rank Xerox, are another space-saving option.

Prices will surely go even lower if you wait, but Rule One of equipping yourself to work at home is that *whatever* you buy, it will soon be out of date.

Look for self-explanatory software, and make sure of good support and technical help when things go wrong. In the UK, a great deal of advice is available, much of it from British Telecom, and from government organisations – the Department of Employment conducts surveys and produces reports on teleworking, as does the Department of Trade and Industry.

There are several specialist consultants such as the Home Office Partnership, and national bodies include the Telecottage Association, and the National Association of Teleworkers.

Contact numbers for consultants, reports and associations include the following:

☐ *The Telecottage Association, Wren Telecottage, Freepost CV2312, Kenilworth, Warwickshire, CV8 2RR (no stamp required inside the UK); or ask for toll-free tel 0800 616 008 and ask for Telecottage Association membership form.*

☐ *Management Technology Associates (chairman, Horace Mitchell, founder of the Telebusiness Club), tel 01252 812252.*

☐ *Analytica: (director, Ursula Huws): tel. 0171 226 8411.*

☐ *Envisage: 'The New Age of Teleworking'; tel 0483 717 155.*

☐ *Home Office Partnership, tel 01223 421911.*

☐ *National Association of Teleworkers, NAT: tel 0404 47467. (The NAT runs a resource register, including corporate customers with a need for telework services).*

☐ *Alan Denbigh, ACRE, executive Director, Telecottage Association, (BT Teleworking Advisor), tel 0145 383 4874.*

■ Getting started – A teleworker's check-list

Ten pointers for home office workers

To be an effective teleworker, practical considerations go far beyond the purchase of a personal computer

When setting up as a teleworker, there are other plenty of other points to consider beyond the hardware and software items for the home office, *writes Claire Gooding.*

Here are a few more considerations for the teleworker's check-list:

☐ Power supplies: in most of western Europe, we take electricity supplies for granted. But large areas of the world cannot, which cuts a large part of the planet's population out of the global information society, but gives a head start to the wired-up office.

The UK is immune to the serious earthquakes and natural disasters which have triggered so many US-based home-working schemes. But no-one has yet invented a foot-treddle to work your PC when the lines have blown down in a storm.

It is wise also to invest in a power surge protector: 'spikes' in electricity supply can cause loss of data, or put your computer out of action for ever.

☐ Telephones. Although most people in the world is still without a phone, if you are teleworker you will probably need more than one phone to save confusion between domestic and business calls.

If you are in the habit of typing in to the keyboard as you are talking on the phone, invest in a headset as well, to avoid hunched shoulders and repetitive strain injury. A call-display unit can be useful to screen incoming calls, as can an answering machine. Many people survive without a modem (discs can be posted) but cannot work without a fax machine or fax/phone. Software for sending faxes from your PC is also available. ISDN lines, if you wish to make the leap into the 1990s, will support videoconferencing and the sending of digital images.

☐ The printer. This is almost as baffling to choose as the computer, and equally unsuited for further detail here. Bear maintenance costs in mind: toner, cleaning units, stationery, etc, for a laser printer quickly add up. Laser labels cost £18 or more a box, for example, and a new cleaner unit around £50. Call-out costs for an engineer make study of the manual well worthwhile, so make sure instructions are in a recognisable language before you buy.

☐ A way of delivering your work. It can be courier, postal service, or increasingly, via modem. The faster the modem, the cheaper it will be to use (but probably more expensive to buy). Some modems now have fax facilities built-in. You will need a modem to benefit from electronic mail (such as Compuserv) and the Internet, which can help with the next vital equipment.

☐ This brings us to 'the virtual colleague.' Loneliness defeats many a freelance worker. Make sure there is someone you can turn to for a good rant occasionally (or even for a gloat), and put them on the first memory button of the phone. This should be a mutual service. Research has shown that low-skilled jobs (where the company is one of the incentives to work) are unsuitable for home-working, and can even be more stressful in isolation. Cerebral and intellectual jobs can benefit from peace and quiet, but few people thrive in isolation.

☐ Equipment security. Few home insurance policies cover computer equipment, so be sure to insure your equipment, and abide by the terms of the policy (such as window-locks on all ground-floor windows, double-locking doors, and so on). Some brokers offer commercial equipment cover: one policy underwritten by Commercial Union in the UK offers £7,500 of cover for as little as £120. An easy precaution is £5 or so spent on an ultra-violet marking pen, so that in the event of a burglary, the true owner can hopefully be identified – and police can return the kit if they recover it.

Pioneering class: women trainees in the village of Hope, in the Derbyshire Peak District, learn to set up computer equipment at the Eccles House Telebusiness Centre, where teleworking training courses are held

☐ Ground rules: Other family members may need guidance on your needs – the sanctity of the office territory, for example, or the use of the telephone (especially answering it to prospective clients). Agree on a 'do not disturb' signal: some phone calls are too important to interrupt unless the house is burning down.

☐ Training: good dealers offer support during the steep learning curve of installation: in the last resort, as the saying goes, look in the manual. It is easy to find specific training courses for particular software products, but many people need more general education, and a supportive network of people to ring when the error messages stop making sense.

In Britain, teleworkers living near Bristol can profit from the Cyberskills Workshops run by the South Bristol Learning Network, and sponsored by the computer services company ICL, which include multimedia, video-conferencing, and one-to-one Internet training.

The Cyberskills idea is spreading, and workshops now take place all over Britain.

☐ A word about health, without which no-one can work at home or away at an office. Teleworking can be very sedentary, without the sprint for the train. Several people interviewed in the course of research mentioned how quickly the lack of exercise had a noticeable effect on general health.

☐ The home office environment: remember to include a well-designed chair. Invest also in an ergonomicalkeyboard, and a good desk (plus footrest, if your feet are not on the floor) before you develop tingling fingers, aching wrists, and pains in the upper arms – symptoms of repetitive strain injury.

If you neglect to use correct office furniture, you may need permanent health insurance – and a good pension sooner than expected. As a self-employed teleworker, you are responsible for your own health. Some companies, such as Digital, send round annual questionnaires to their teleworkers.

The author Sara Lambert, in her report for the recent Forum Europe/IBM conference on Teleworking in Europe IBM, describes the two sides of the teleworking coin with the familiar images of the relaxed home-worker enjoying the view, and the frazzled mother, fending sticky toddler fingers off the keyboard. "At its best the teleworking phenomenon will revolutionise working patterns on a scale unknown since the industrial revolution" she remarks.

"But at its worst, teleworking is forced on employees by companies trying to cut costs. Ill-prepared and unprotected by welfare or health and safety law, teleworkers work all hours for less money and none of the perks of their salaried counterparts."

There is indeed a two-tier culture in teleworking, with often a great divide between employees and outside workers. In the matter of setting up to work at home, the most privileged are those employed by large organisations with 'flexible working' policies. They do not have to think about equipping themselves: the kit is laid on, computer, modem, even private network and voice messaging.

For those fortunate enough to be employed by high technology companies, such as IBM, Digital, Hewlett-Packard, Cable & Wireless, BT or Mercury, working at home is increasingly likely to be an option.

Generally, teleworking cuts costs for the employer and employee alike, reducing stress and overheads. It might not suit ambitious types: seeing and being seen at the office is still thought to be a pre-requisite for the higher echelons of management.

This is the view of Dr Ursula Huws, author of the 1993 survey for the UK Department of Employment – "the potential for teleworking is greater than actuality," she says. "The *technology* is there, but the main problem is that managers do not like to manage people they cannot see."

Dr Huws believes she is the originator of the word "teleworker," a term she now regrets as it summons up some misleading images, and obscures so many social issues.

In the UK, they are (often by choice, but not always) responsible for their own National Insurance and pension contributions. As self-employed workers they receive few or no benefits (such as maternity leave), and they are excluded from other rights enshrined by European Community policy – an ironic situation, when the EC is so keen to promote teleworking within Europe.

The social and tax structure in Britain has not changed to recognise the status of home-based workers. The Inland Revenue can charge capital gains tax on the sale of a home, for instance, if one of its rooms is dedicated exclusively to office-space. There is a threat that some people who use telecottages might be considered as employees of the telecottage rather than self-employed.

There is no single union to champion the teleworking cause. Vigorous campaigning is left to the computer and telecommunications industry. For example, the networking technology company, Sinix Communications mounted a campaign in February to cut down on car mileage by making teleworking more attractive.

It wants to see a re-introduction of the 100 per cent first-year tax allowance for capital equipment expenditure for teleworkers. Its argument is based on the 'Cars, Roads and Pollution' paper by Horace Mitchell, adviser to the Department of Trade and Industry.

CASE STUDY Teleworking from sheep to shore

A long way from the rush of city life: sheepfarmer John Ruscoe with his collie, Joey – and Chloë the lamb

Distance is no problem

In the Orkneys, sheepfarmer John Ruscoe also designs mainframe software

"Sorry I wasn't here when you called," said John Ruscoe. "I was just pulling one of the sheep out of the mud."

An Orkneys sheepfarmer, Mr Ruscoe also designs mainframe software for CSD, the corporate systems division of the computer services company, ICL, *writes Claire Gooding.*

Mr Ruscoe started teleworking in January 1987, moving to the Orkneys in May of that year, to fulfil his lifelong dream of becoming a farmer. He had been working for ICL since 1974, as a systems programmer at Kidsgrove in Staffordshire on the edge of the UK Peak District.

When ICL relocated its software design to Manchester, the journey to work took three hours out of his day – "there had to be a better way of using time, so I decided to investigate working at home," he explains.

"ICL's culture had sustained home-working since 1970, when married women with young children were encouraged to stay on-line from home, so that ICL could retain their skills."

Mr Ruscoe bought a cattle farm in the Orkneys, a favourite holiday destination, chosen because no farm in the Peak District was affordable. A novice at farming, he decided to keep his day job, and to work part-time. His software job is the development of TPMSX, ICL's software for high-volume transaction processing under its VME mainframe operating system.

"I knew I'd never make a living at farming," he admits. "We decided to increase the number of sheep to 250, get rid of the 28 cows, and I went back to full-time teleworking in 1990. A Manchester salary goes a long way in the Orkneys."

He works on an ICL CX 386/25 PC, linked via a modem over a BT line.

"The main thing that improved communications between on-site people and myself was being programmed with an internal telephone line," he says.

He cites the benefits of teleworking: "I like it for all the usual reasons: flexibility, 'no stress' travelling, and another thing is that the social life takes a different outlook: it forces you to mix and meet, socialising with people outside your work sphere. But I still feel very much part of CSD. We're using electronic mail extensively to stay in touch: distance make no difference."

The Orkneys, he points out, are something of a hotbed of teleworkers. Encouraged by funding from the European Community, (for which the Orkneys is an ideal model of rural enterprise), the Highlands and Islands Enterprise Board has been quick to capitalise on being the first in the UK to get ISDN lines.

"They think nothing of using electronic whiteboards for 'remote teaching' in the schools here," he says. "It just has to happen in areas like this, where your nearest neighbour is 15 miles away."

Current systems with risk management functionality

	Strengths	Weaknesses	Solution providers
Product processors	Strong for individual products, good intra-day	Narrow view of the world, trade orientated analytics, mostly market risk only	FNX, C-ATS, BARRA, DEVON, Renaissance
Management information systems - type applications	Reconcilable financials, regulatory compliance, can model balance sheet	Batch cycles, limited product-specific functionality, market or credit risk only	RMT, Treasury Services, IPS, Sendero
Integrated banking packages	Internally reconcilable, include many products	Inadequate risk management analytics	Hogan, Kapiti, Internet, ACT
In-house risk management solutions	Built to bank specifications, include expertise	Hard to maintain, expensive, piecemeal	Banks: Bankers Trust, Citibank, Chemical Bank, NatWest, et al
3rd party risk management solutions	Stronger technology, cheaper, multi-product, can be customised	Shallower analytics, unproven in market, still inadequate to meet banks' needs	HP/ACT Financial, SSI, Algorithmics, Intelcom

Source: The Tower Group

Key aspects of risk management practices at banks

	Risk policy committees	Aggregation level	Capital allocation level	Earnings-at-risk/ Value-at-risk analysis	Limits usage
Leaders	Yes-multiple	Attempting enterprise-wide	To business unit, some to product level	Both	Some dynamic limit allocation abilities
Followers	Yes-credit market sometimes	Branch by branch, whole picture may be aggregated manually	By asset category as required by regulations	Sometimes	Basic limit setting, generally well used, but not complete
Laggards	Credit policy only	Not aggregated beyond business unit	By asset category as required by regulations	Not done	Inadequate limit definitions

Source: The Tower Group

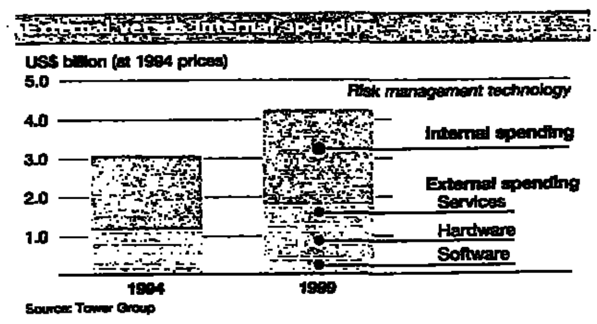
Most banks have some form of systems support for long-term market risk management planning. However, even at the most sophisticated banks, current market risk management systems are usually not integrated with other risk functions including credit risk, and only a few banks have made any real progress towards actively managing operational risk, writes Paul Taylor.

Intra-day market risk analysis and portfolio management is usually the responsibility of local office managements. Some banks are now using sophistcated applications for this purpose capable of modeling the effect of transactions on the entire branch's portfolio. These systems are increasingly being used by what is being termed the middle office which acts as an intermediary for dealing room and operations, ensuring that trade details are complete and correctly entered, assisting with pricing analysis and performing risk management and hedging for individual transactions.

More than 2,000 traders work at Liffe, the London International Financial Futures and Options Exchange, pictured left, where the trading floor is packed with advanced technology. A high level of IT support is given to pre- and post-trade activities in Liffe products, writes Michael Wiltshire.

Traders in the 'pit' area are viewing free-standing screens with market and price information while large electronic display boards reflect real-time Liffe prices which are simultaneously broadcast to the world at large through 60 'quote vendors' - for example, Reuters Telerate. In the foreground, brokers and booth administrators process client orders. Liffe is the world's fastest-growing futures and options exchange and the third largest after the Chicago Board of Trade (see above) and the Chicago Mercantile Exchange.

All the positions traded on Liffe are cleared by the London Clearing House, an independent body owned by the six leading UK clearing banks. Liffe also monitors members' positions in real-time and regularly conducts an audit of members' internal procedures.



Source: Tower Group

Banks and other financial institutions around the world have long been faced with the strategic challenge of integrating information systems with business goals. Pictured, right, is a voice and market data trading 'platform' allowing users to access and analyse streams of market information for rapid trading decisions. The system, from Syntegra, is used in 35 countries by such institutions as Liffe, the London International Financial and Futures and Options Exchange, as well as Credit Suisse, Merrill Lynch, BZW, Bank of Novia Scotia, New Japan Securities and Telekurs. In the area of global risk management, Syntegra systems provide banks with an on-line consolidated picture of financial risk across all traded instruments, regardless of location or time zone.

FORTHCOMING ISSUES

The next issue of the IT Review will be published on Wednesday May 3, 1995. Our regular four-section format will be adopted - a main focus, a software theme, an update on facilities management and a 'directions' section, as explained in the announcement on page two of this issue. Subsequent reviews will appear on the first Wednesday of the month.

Here, in brief is a summary of the four main sections planned for the May issue of FT-IT review:

Mobile Computing - sales of notebook and other lightweight, portable computers continue to grow more quickly than those of any other segment of the computer market. As a result, portable PCs are now an integral part of the IT strategies of many companies and other organisations.

Hardware.
The notebook and sub-notebook PC.
Docking stations and Lan cards.
Hand-held PCs and personal digital assistants, PDAs
The rugged hand-held computer.

Technology.
PC cards; 'add-on' peripherals.
Pen technology.
Screen development.
Evolution of battery technology.

Communications.
Hard-wired modems.
Radio communications.
Communications and workgroup software.

Printers.

Software at Work - Financial Consolidation and Integration. Users of integrated accounting systems have begun to tackle problems beyond their own shores. Many are looking to 'globalisation,' the standardisation on a particular package as the answer to running several national offices of an international organisation.

IT Outsourcing and facilities management: a monthly update.

Directions.
Voice technology - The market for voice technology applications is growing fast as touch-tone telephones become the norm. Key topics will include:
Hardware and infrastructure.
Voice response and recognition.
Telephony and the mobile worker.

Other regular features will include:
IT Update: a round-up and analysis of significant events in the computer industry.

View from the Top: an interview with one of the industry's most influential figures.

The Issue:
Focus on Networking
Software: Project Management
Facilities management: monthly update
Sections: Multimedia

The Issue:
Focus: Computers in Finance
Software: Human Rescources
Facilities management: monthly update
Directions: Rapid Application Development

The Issue:
Focus: Technology in the Office
Software: Enterprise Intelligence
Facilities Management: monthly update
Directions: Rapid Application Development

The Issue:
Focus: Computers in retailing
Software: Logistics and Distribution
Facilities Management: monthly update
Directions: Geographical Information Systems

The Issue:
Focus: Computers in Design and Manufacturing
Software: Sales and Marketing
Facilities Management: monthly update
Directions: Geographical Information Systems

For a full synopsis and details of topics to be covered in the coming months, telephone Simon Larter or Daisy Veerasingham, FT Advertising Department, London, on +44(0)171 873 4129, fax +44(0)171 873 3662, or write to the address below.

Editorial background information for consideration for future issues can be sent to the Production Editor, IT Review, FT Surveys Department.

Financial Times
Number One Southwark Bridge
London SE1 9HL

FINANCIAL TIMES

COMPANIES & MARKETS

Wednesday April 5 1995

IN BRIEF

Apple's PC head set to resign

Apple Computer is expected to announce a broad reorganisation of its operations and the resignation of one of its top executives, as the company struggles to maintain its momentum in the personal computer market. Page 18

La Générale net profits grow 27%
Société Générale de Belgique, the diversified Belgian holding company, increased net profits 27 per cent to BFr11.01bn ($390m) in 1994. Page 16

Bremen set to sell stake in energy arm
The city state of Bremen, Germany's smallest and poorest state, said it would sell a 49.9 per cent stake in its municipal energy distribution company, or Stadtwerke, for DM684m ($498m). Page 20

Bertelsmann sees further gains
Bertelsmann, the German media and publishing group, expects a "substantial" increase in profits for the year with a 9 per cent rise in sales to DM20bn ($14.6bn). Page 16

Hypo-Bank beats rivals with 7.4% rise
Bayerische Hypotheken-und Wechsel-Bank reported the best performance of the leading German banks, with annual group operating profits up 7.4 per cent to DM1.1bn ($803m) in 1994. Page 16

Slovakia reins in investment funds
The government of Slovakia is planning to curb the influence of the country's investment funds, which are the main investors in private industry, before a round of mass privatisation, tentatively scheduled for July. Page 20

Murdoch arm in airline talks
Mr Ken Cowley, chief executive of News Limited, the Australian newspaper arm of Mr Rupert Murdoch's News Corporation media group, is to meet federal government representatives for talks about the future of Ansett, the Australian airline in which News has a 50 per cent interest. Page 19

San Miguel pours pesos into Asia
San Miguel, the Philippine beer and soft drinks company, has earmarked 40bn pesos ($1.5bn) for capital expenditure between 1995 and 1997 to bolster its share of the Asian beer market. Page 19

US expansion for Siebe
Siebe, the UK controls group, announced a big expansion in North America with the acquisition of its first US fluid systems business and a compressor manufacturer. Page 21

Amersham sells Hy-Lite to E Merck
Amersham International, the UK health science group, has sold its environmental assessment division to E Merck, the German pharmaceuticals and chemicals group, for more than £5.5m ($8.8m). Page 21

Pilkington pays out to resolve dispute
Pilkington, the UK glass manufacturer, is to pay US rival PPG Industries $50m as part of an agreement to end a 10-year legal dispute between the two companies. Page 22

Companies in this issue

Market Statistics

Chief price changes yesterday

FRANKFURT (DM)			
Rises			
BASF	287.8	+	7.3
Bay Vereinsbnk	402.5	+	10.7
DKAG Colonia Pr	665	+	25
Degussa	405	+	13
Henkel	537	+	11.5
Linde	757	+	22
NEW YORK ($)			
Rises			
Empresas L	12¼	+	1¼
Nacco Int	21⅛	+	7½
Falls			
Chrysler	40	–	2
Host Marriott	10⅜	–	1⅛
Pittston	14⅝	–	3
Timberland	22½	–	3⅝
LONDON (Pence)			
Rises			
Go-Ahead Group	191	+	15
Pittencrieff	83	+	9
Wyman	114	+	12
Falls			
Clinical Comp	41	–	14
Colleagues	150	–	11
Ugland Intl	99	–	18
TORONTO (C$)			
Rises			
Boscal Corp	20¾	+	2¼
Magna Intl	53	+	2½
Falls			
Dundee Bancp S	10½	–	1
Intertan	9	–	⅜
Seagram	40	–	2½
Terra Inds	14⅛	–	1⅛
PARIS (FFr)			
Rises			
Imetal	492.5	+	21.5

Lyon des Eaux	468.1	+	15.6
Pechiney Intl	118.7	+	6.4
Remy Cointreau	163.8	+	9.3
Total B	303	+	13.2
Falls			
Finextel	67	–	6.3
TOKYO (Yen)			
Rises			
KDD	7600	+	450
Orient Corp	478	+	43
Falls			
Hattori Seiko	710	–	68
M'bishi Plastics	395	–	39
Nintendo	4700	–	380
Seibu Railway	2790	–	390
HONG KONG (HK$)			
Rises			
London/Pac Ins	21.3	+	0.95
Falls			
CDL Hotels	3.025	–	0.125
Champion Tech	0.86	–	0.1
Chi Cheung	2.1	–	0.2
Peregrine Inv	8.25	–	0.45
Tristate	5.6	–	0.3
BANGKOK (Baht)			
Falls			
Amarin Prntg	51.0	–	5.5
Siam City Cred	64.5	–	7.0
Siam Com Life	45	–	5
Thai Finance	97.5	–	10.5
Thai OPP	41.0	–	7.5
Thai Textile	30.75	–	4.25

New York and Toronto prices at 12:30.

Reichmann and Soros freeze Mexican plans

By Bernard Simon in Toronto and Leslie Crawford in Mexico City

Mexico's economic difficulties have dealt a sharp setback to Mr Paul Reichmann's hopes of rebuilding his fortune and reputation from the ashes of Olympia & York, the family controlled company which spearheaded London's Canary Wharf and other high-profile property developments in the 1980s.

Reichmann International, a company owned by the Reichmanns and Mr George Soros, the US financier, has frozen $1.25bn of property developments in Mexico City which was to include the country's tallest building. Staff have been laid off in Mexico City, and the head office in Toronto has shrunk by one third.

One former employee said Mr Reichmann "certainly expected [the troubles in Mexico] to be of shorter duration than they will be". The company would not say how much it had already invested in Mexico, but top-dollar locations on the Reforma Boulevard, where Reichmann International recently acquired a 6,280 sq m site, fetched as much as $4,000 per sq m before the financial crisis which began with the devaluation of the peso.

Reichmann International also owns 82,000 sq m of land in the new Santa Fe business district, where it had planned to develop a 30-building project in partnership with ICA, Mexico's largest construction company. It had also planned to redevelop an area of downtown Mexico City which was badly damaged in the 1985 earthquake.

Mr Jorge Machado, Reichmann International's financial director in Mexico, said: "The projects will go ahead, if at a slower pace, because the land has been bought and it is not feasible to sell it."

The Mexico joint venture is separate from the Quantum Realty Fund, an property investment fund in which Mr Reichmann and Mr Soros are also partners. Mr Soros has invested in the Mexico projects in his personal capacity.

The Reichmann and Soros camps are understood to disagree over future funding of the Mexico City projects. However, Mr Vernon Schwartz, chief executive of New York-based Reichmann International LP, which acts as adviser to the Quantum fund, said yesterday both partnerships were "still intact".

The peso devaluation has hit the Mexican projects on several fronts: targeted clients – multinationals and foreign banks – have put their own investment decisions on hold until Mexico's financial outlook becomes clearer.

Reichmann planned to fund about 50 per cent of the projects with local capital, but with interest rates soaring above 90 per cent, local financing has become prohibitive. Mexican banks have frozen practically all new credit – particularly in high-risk ventures such as property. Office rents have also fallen in dollar terms, as the recession has hurt demand.

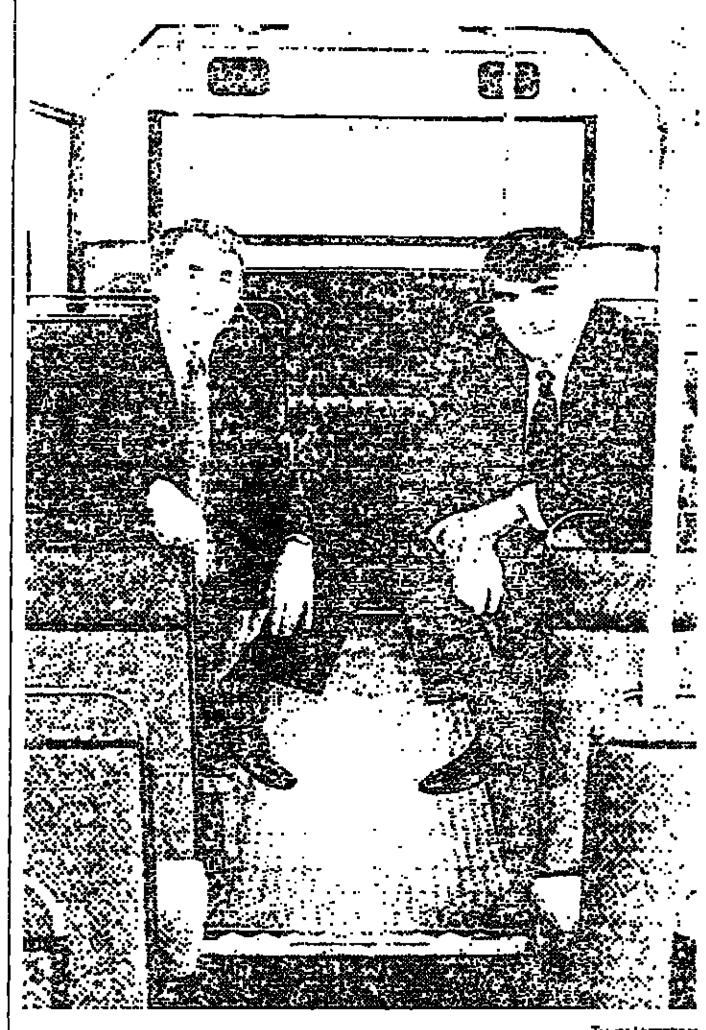
"Instead of building on a speculative basis, ahead of demand, our activities will now be market-driven," Mr Machado said. "Before the crisis, our planning horizon was four to eight years. Now we are looking at the far end of that time-frame."

The Santa Fe project, conceived as a "state-of-the-art" urban development, with shopping malls, sophisticated office blocks and residential complexes, will now be built on an incremental basis.

ICA was also interested in joining Reichmann to build the 52-storey tower block on Reforma Boulevard. The building was described by Mr Reichmann last year as "a landmark that will rival those anywhere in the world".

O&Y was the world's biggest property developer before it collapsed in May 1992. The Reichmanns retain a 20 per cent stake in O&Y's US subsidiary. The US operation, whose flagship is the World Financial Centre in lower Manhattan, is trying to reach a debt restructuring agreement with its creditors.

UK bus groups to merge



Trevor Humphries

Double-decker: Trevor Smallwood (left), chairman of Badgerline, and Moir Lockhead, chairman of GRT, announced a merger that will create the UK's second-largest bus company. Story and Lex. Page 21

Rudloff in Moscow securities venture

By Nicholas Denton in London and John Thornhill in Moscow

Mr Hans-Jörg Rudloff, the banker who built the modern euromarkets in the 1980s and led investment bank CS First Boston into eastern Europe, is setting up his own securities house in Moscow.

MC, the securities firm which Mr Rudloff formed last year after leaving the CS group, is expected today to announce a joint venture in the Russian capital.

MC and its Swiss backers will take a 45 per cent stake in United City Bank, which will have paid-in capital of $20m. The Russian partner with 55 per cent is Sintez Corporation, a Russian oil, transport and banking conglomerate.

Mr Rudloff said he aimed to create "one of the major investment banks domestically in Russia". United City Bank will rival CSFB, which is believed to trade as much Russian equity as all other brokers put together. MC expects the joint venture to employ about 65 staff within three months, the same number as at CSFB in Moscow. Moscow would be the MC group's largest office outside its London headquarters.

While CSFB has mainly traded equities, United City Bank will also engage in sales and trading of fixed-income products such as bonds, corporate finance and asset management. It will focus on sectors in which Sintez has expertise and western interest: oil, gas and mining.

MC is moving into a potentially lucrative market, which gave CSFB revenues of about $100m last year. Its move comes after political and market turmoil caused investment banks such as Goldman Sachs of the US to move out of Moscow last autumn.

Mr Rudloff was head of CSFB in Europe until 1993 when he was replaced as part of a reorganisation. He took several executives with him to MC. Mr Luis Mendez, who will be responsible for United City Bank's securities operations, was head of equity at First Boston.

The formation of the Moscow joint venture is the most significant move by MC since Mr Rudloff formed it last year with $75m in capital and the backing of Banque Bruxelles Lambert of Belgium. Mr Rudloff and other partners own 35 per cent of the company. BBL has 29 per cent, and the remainder is divided among institutional investors.

ING says Barings probe taking too long

By John Gapper and Nicholas Denton in London

Mr Hessel Lindenbergh, a senior director of Internationale Nederlanden Group, the Dutch bank, yesterday criticised the Bank of England for taking too long to complete its inquiry into the collapse of the merchant bank Barings.

Mr Lindenbergh, the ING director in charge of investment banking, said that unless the Bank produced initial findings by the end of this month, ING might start to dismiss the Barings executives it believed to be responsible.

His comments are the clearest indication yet of ING's discomfort at criticism that most Barings executives remain in place despite its collapse two months ago from losses built up by Mr Nick Leeson, a Singapore-based trader.

Mr Lindenbergh, in an interview with the Financial Times, said ING's attempt to relaunch Barings operations was being hindered by uncertainty over which executives would remain at Barings following the Bank's inquiry.

His comments follow Monday's resignations of Mr Peter Baring and Mr Andrew Tuckey, the former chairman and deputy chairman of Barings. He said it was "right that at least the top management should take responsibility".

Mr Lindenbergh said he would seek a meeting with senior Bank officials this week to express his concern at the time the inquiry is taking. He would call for ING to be shown its initial findings by the end of this month.

Mr Eddie George, the Bank of England governor, said last week that its board of banking supervision expected to have completed the first stage of the inquiry – setting out the sequence of events – by the end of May.

Mr Lindenbergh said he had "felt surprised" when he read Mr George's comments. ING had originally believed that Barings executives should be innocent until proven guilty, but "you cannot wait for six months to see who is guilty".

He said that "with hindsight" it might not have retained all executives if it had known the timing of the inquiry. The Bank had not indicated that ING's original request for it to be completed within a month was unreasonable.

The Bank declined to comment on the timetable, or Mr Lindenbergh's comments.

Mr Lindenbergh said the Bank had provided a list of 20 Barings executives to be interviewed. He believed up to 40 executives could be questioned, although he hoped the number losing their jobs would be far smaller.

He also indicated that Mr Ron Baker, the former head of the Barings financial products group which was responsible for derivatives trading, was likely to be one of the Barings executives who would eventually lose their jobs.

Mr Lindenbergh said it was "my firm belief that maybe he was not actively involved, but the first line responsibility was within his group". He said he was "afraid" that Mr Baker would not remain employed by ING and Barings.

Mr Baker said afterwards that "at ING and Barings' request, and command. I am not able to comment on anything [Mr Lindenbergh] said." Mr Baker has been relieved of management responsibilities by ING, but remains employed.

Mr Lindenbergh said clients had been unsettled by the possibility that Barings executives they were dealing with may not stay in place. "Outsiders are asking our staff in really quite a direct way: 'Are you going to be here three weeks from now'. Are you on the list?'" he says. With or without the Bank's help, ING must decide whom to dismiss. "Preferably, it will be the smallest group possible, but we have got to make it clear to our staff and customers that the people with Barings today will be there for years to come."

ING's first concrete restructuring of the business will be the implementation of a new "market co-ordination" committee to oversee its trading and risk management. ING also intends to introduce clearer reporting lines.

Mr Lindenbergh said ING intended to keep all parts of Barings' activities, not just the emerging markets securities broking and primary activities which attracted it most. ING would expand the former Baring Brothers corporate finance business in the Netherlands and Europe.

● Baring Securities, the broking arm, is expected to announce its first senior recruit since the collapse. It has appointed Mr Robert Davies, formerly of Smith New Court, as global resources analyst.

Germany unlikely to oppose Leeson extradition to Singapore. Page 9

Barry Riley

Politics upsets the UK Treasury's sales pitch

Financial virtue (relative, anyway) has not yet brought great rewards for the British government in terms of lower borrowing costs. So far this year, yields on gilt-edged have dropped less than on government bonds in the US, Germany, and Japan.

The best that can be said is that the UK has moved away from the fringe Europe camp – Italy, Spain and Sweden – where yields remain at 12 or 13 per cent, and junk bond fund managers make complex calculations about debt restructuring.

In further pursuit of sound finance, Her Majesty's Treasury has now produced a novel document called a Debt Management Report. This forms part of its plans to move in the direction of a "predictable and transparent" issuance policy for gilts.

The report, like most sales brochures, tells a positive story, with gilt sales in the financial year starting tomorrow expected to fall from £29bn to £23bn ($36.8bn) (compared with the massive figure of almost £50bn in 1993-94).

Unfortunately for the Treasury, those tiresome politicians over the road are doing their best to spoil things. Tory backbenchers, growing increasingly panicky about the prospects for the next general election, have been demanding commitments to tax cuts before the last round of tax rises has even taken effect. Labour would prefer to raise spending rather than cut taxes, but neither party is offering much comfort to bond investors.

How much better for debt managers it would be if the parties were bickering instead about balanced budgets, reduced debt burdens and long-term targets for low inflation. But you don't win marginal seats on such considerations. Meanwhile the local elections, the Scott Report and other challenges loom for the government.

You would think that these problems of debt versus democracy would be felt more keenly in countries such as France – where, paradoxically, 10-year bond yields are 60 basis points lower than in the UK. But the UK's hostility to the European single currency has imposed a risk premium. Sterling is drifting without any anchor that international investors can recognise.

> There has been a desertion of the gilt new issue market by foreigners and banks

No amount of fussing about transparent funding timetables or open repo markets is going to make much difference here, though the Treasury has persuaded itself that a reduction of 10 basis points in its borrowing cost would eventually save the taxpayer £250m a year. How much, on that reasoning, is Euroscepticism costing? But then, no red-blooded votechaser sets an upper limit to the cash cost of maintaining the nation's sovereignty.

Can the cost come down? Real sterling bond yields, as measured by index-linked gilts, have remained steady at 3.9 per cent this year, and the implied long-term inflation expectation of about 4.5 per cent has dropped only slightly – much less than appears to have happened in either Germany or the US, despite wildly different currency trends in those countries.

There has been a desertion of the gilt new issue market by foreigners and banks, two groups which together bought £25bn worth in 1993-94 but have been small net sellers over the past year. So the market has been dominated by domestic savings institutions, who seem to want higher yields than their counterparts in several other countries. No wonder the Treasury seeks more participation by foreigners – who still own about 15 per cent of the gilts in issue.

This pattern of buying and selling may help explain the curious and persistent hump in the yield curve: the foreigners have been selling mediums while the domestic pension funds and life offices have been attempting to buy longs at a time when the average maturity of conventional gilts has been declining (from 9.2 to 9.0 years during 1994-95).

The Treasury now promises a more balanced maturity profile for new issues, but the financial year's first two auctions will be hump-boosters at 5 and 10 years.

Meanwhile sterling bond yields remain nearly 50 basis points higher than on Belgian government debt (a Brussels mountain which is equivalent to 136 per cent of GDP, against 47 per cent for the UK). The UK Treasury must think there is no justice, and history will probably show that there isn't.

La Générale raises earnings 27%

By Lionel Barber in Brussels

Société Générale de Belgique, the diversified Belgian holding company, increased net profits 27 per cent to BFr11.01bn ($390m) in 1994 compared with BFr8.68bn in the previous year. The group expects to at least equal the result this year.

Mr Etienne Davignon, group president, said all shareholdings made an increased contribution to the earnings, with strong performances from Tractebel, the Belgian energy group, and Generale Bank. *About 56 per cent of the* group's shareholdings are in the service sector.

Mr Davignon confirmed that the group has an BFr18bn cash mountain, partly due to disposals.

However, he insisted that La Générale intended to stick with its present investments, including Accor, the troubled French hotels group in which it holds a 12.2 per cent stake.

Last year, the group's industrial companies, Union Minière and Recticel, benefited from an improvement in their markets, and internal restructuring. La Générale has reduced its hold*ing in Union Minière to just* over 50 per cent, and the mining company sold its US zinc operations at a profit.

Looking to the future, La Générale is setting much store by its new investment in Sagem, the electronics group. By the end of the year, it intends to raise its stake to 20 per cent from 17 per cent.

The group intends to use Sagem and other vehicles for greater expansion overseas, with Generale Bank eyeing a move into China from its Hong Kong operation.

In 1994, the group's disposals were BFr17bn while invest*ments totalled BFr18bn and* were roughly in balance. Its stake in Union Minière has fallen to 50.1 per cent from 84 per cent with industrial companies accounting for 25 per cent of the group's shareholdings.

La Générale's consolidated earnings on ordinary activities were up 41 per cent in 1994. The group will propose a dividend of BFr85 on its ordinary shares and BFr99.15 on its other class of shares.

This would mean a total dividend payout of BFr8.08bn, compared with BFr7.09bn previously, taking into account the bonus shares issued last year.

Lenzing back in black after two years

By Ian Rodger in Vienna

Lenzing, the world's largest viscose fibre maker, reported consolidated annual net income of Sch304.6m ($30.9m) in 1994 after two years of losses, and forecast sustained profitability this year.

The directors recommended a doubling of the dividend to Sch10 per share.

Mr Heinrich Stepniczka, chief executive, played down speculation that Bank Austria would sell its 33 per cent stake in Lenzing to Courtaulds of the UK.

He said it was "not realistic" *to believe the European Union* would approve such a sale. Lenzing and Courtaulds dominate the rayon business in Europe.

Lenzing said its sales were down 3.5 per cent last year to Sch8.4bn, mainly due to divestment of two subsidiaries.

Pre-tax profit soared 78 per cent to Sch305.1m, due largely to cost-cutting and the sale of a loss-making filament subsidiary.

Textile fibre consumption developed positively last year, and viscose staple fibre production declined because of lower output in eastern Europe and Japan.

The group's performance in the first quarter of 1995 was above that in the same period of last year, but it warned that the decline of the dollar and the Italian lira against the schilling gave competitors an advantage.

Schindler issues profits warning

By Ian Rodger

Schindler, the world's second largest manufacturer of elevators and escalators, forecast lower profits for the current year due to price pressures in building construction markets.

"For reasons of currency, interest rates and price developments, we expect a lower group net profit in 1995," Mr Alfred Spörri, finance director, said yesterday.

The news sent the group's bearer shares tumbling 8.2 per cent to SFr6,975 on the Zurich stock exchange.

Mr Alfred Schindler, chief executive, said the group's volumes were up in the first quarter, but prices fell substan*tially. Mr Schindler said he* saw no risk of a dividend cut.

Schindler said net income fell 8 per cent last year to SFr155.1m ($138.5m), mainly because of lower financial income on its SFr1.08bn in liquid assets. Operating profit advanced 15.9 per cent to SFr174.5m on revenues up 5.4 per cent to SFr4.7bn.

New orders were up 11.1 per cent to SFr4.9bn. Elevator and escalator orders rose 9.1 per cent to SFr4.2bn, rolling stock orders were up 24.4 per cent to SFr291m and orders in the Also computer services subsidiary jumped 25.6 per cent to SFr387m.

Schindler said Asia-Pacific markets for elevators and escalators were growing, but competition was intense.

The US market improved *slightly at a low price level,* and European markets remained stagnant. The improvement in the consolidated operating margin, to 3.7 per cent from 3.3 per cent, was attributed to enhanced competitiveness.

Mr Spörri said the group had re-examined its strategic position given the current insufficient profit margins. It concluded that its products were highly competitive, and that the best course was to persist with its policies of global presence and internal growth.

He said the current year was a crucial one for the rolling stock subsidiary, which was awaiting orders from the Swiss federal railways.

Mr Schindler said he would become board chairman at the annual meeting and that he, *Mr Spörri and Mr Luc Bonnard* would form an executive committee of the board.

Mercedes cuts purchasing costs

By Kevin Done, Motor Industry Correspondent

Mercedes-Benz, the German car and commercial vehicle maker, said yesterday its purchasing costs for components and materials would be cut by DM3.5bn ($2.5bn) during 1993-95.

Mr Manfred Remmel, purchasing and production director for Mercedes-Benz's car division, said the group's purchasing costs had been cut by DM1.5bn last year as part of a collaborative effort launched with its suppliers in 1993.

Costs would be reduced by a further DM1bn this year.

The company, the automotive subsidiary of Daimler-Benz, the leading German engineering group, has been restructured in the past two years after it plunged to a net loss of DM1.19bn in 1993.

It rebounded strongly into profit last year, helped by the recovery of its car operations. Mr Helmut Werner, Mercedes-Benz chief executive, has forecast that its commercial vehicle division would return to profit this year.

As part of the restructuring it set up its Tandem project with suppliers to cut purchasing costs. Mr Remmel said Mercedes-Benz had removed "a large part of its cost disadvantage versus its competitors in the US and in Japan".

About 30 per cent of the cost reductions had been achieved by its suppliers with 70 per cent from its own plants.

Mercedes-Benz had a purchasing bill of more than DM32bn for materials, components, plant and equipment and services last year compared with DM30.7bn in 1993. The rise was due to increased output.

German groups supplied goods and services worth about DM27bn last year compared with DM26.4bn a year earlier.

Hypo-Bank beats rivals with 7.4% annual rise

By Andrew Fisher in Frankfurt

Bayerische Hypotheken-und Wechsel-Bank yesterday reported the best performance of the leading German banks, with annual group operating profits up 7.4 per cent to DM1.1bn ($803m) in 1994.

Mr Eberhard Martini, chairman, said the bank hoped for an "acceptable" result in 1995, though this would not be a peak year.

Like Bayerische Vereinsbank, its Bavarian rival, it benefited from a strong mortgage business, though this is slackening. Interest income rose 13 per cent to DM4.1bn and Hypo-Bank cut risk provisions 25 per cent to DM864m.

BHF-Bank also posted improved results yesterday. The bank is restructuring to improve profitability and effectiveness as an advisory, trading and asset management bank. Its operating profits were up 7.6 per cent to DM348m.

However, both banks suffered from weak bond markets and followed others in reporting a deterioration in own-account trading. Hypo-Bank made a DM117m loss in trading on its own account after a DM251m profit the previous year. BHF-Bank's own-account *trading profit fell 87 per cent* to DM16m.

Hypo-Bank said its interest margin improved in its mortgage business, although it was unchanged over the range of its banking business. On the commission side, profits were affected by weak securities markets and fell 5 per cent to DM865m. Net income was down 2 per cent to DM518m.

At BHF-Bank, partial operating profits (which reflect basic lending and fee business without own-account trading) were 26 per cent higher at DM467m. Interest income was 20 per cent higher at DM742m as a result of increased credit volume and improved margins. But commission profits were only 1.6 per cent higher at DM357m. Mr Wolfgang Strutz, head of BHF-Bank, said the first two months of of this year showed that "1995 will not be an easy banking year".

Bertelsmann sees further gains after strong midterm

By Judy Dempsey in Bonn

Bertelsmann, the German media and publishing group, expects a "substantial" increase in profits for the year with a 9 per cent rise in sales to DM20bn ($14.6bn), according to a half-year statement issued yesterday.

Sales for the first half of the trading year to last December, rose 11 per cent to DM10bn compared with the same period a year ago. Foreign activities accounted for DM6.8bn, an increase of 15.9 per cent, while domestic sales rose 5.3 per cent to DM3.6bn.

Profits over the same period rose 7 per cent. The group's total profits after tax in the previous year totalled DM750m. "The indications suggest that Bertelsmann's profits could tip DM800m," an analyst said, although the company would not confirm this. Bertelsmann is the world's second largest publishing group.

The sharp increase in sales was partly due to a spate of acquisitions in recent months. These include the seven magazines of the New Tork Times group, as well as the Italian-owned Ricordi music/recording company.

The entertainments division of Bertelsmann, which includes music and recording labels, rose 13.6 per cent to DM3.4bn. Gruner+Jahr, Bertelsmann's newspaper and publishing division, reported a rise in sales of 13 per cent to DM2.2bn. This comes at a time when German newspapers and the media industry are under pressure to attract advertising and readership as more titles come onto the market.

The rise in profits and turnover has been coupled with an increase in investments as Bertelsmann enters the multimedia business and expands into the film industry. Investments from July to December totalled DM1.3bn compared with DM418m over the previous six months.

In spite of the high level of investments and acquisitions, analysts said Bertelsmann may be interested in a stake in MCA, the US entertainment business owned by Matsushita of Japan, the world's largest consumer electronics company.

Bertelsmann may try to expand its publishing division. Earlier this week, there were reports that Macmillan, the UK's largest independent publisher, might be considering a trade sale, with Bertelsmann a potential buyer.

Fininvest unit may float minority stake

By Andrew Hill in Milan

A minority stake in the insurance and financial services operations of Fininvest, Mr Silvio Berlusconi's private business empire, could be floated on the Italian stock exchange next year, according *to the companies' main minor*ity shareholder.

Mr Ennio Doris, who owns large minority stakes in a number of the Fininvest financial subsidiaries, said yesterday he had agreed with Mr Berlusconi to set up a new vehicle for the financial interests. Initially, Fintre, Mr Doris' company, would own half this new vehicle and Fininvest would own the rest.

"The aim is precise: to set up by the end of this year a company which owns 100 per cent of these activities, and then to place a minority stake on the market next year," he said. Fininvest and Fintre would hold equal stakes even after such a placing, he added.

Mr Berlusconi, media magnate and former Italian prime minister, has been seeking ways to distance himself from parts of his empire, to avoid accusations of a conflict of interest. Main attention has focused on his media interests, which include three national television channels, but it would probably be easier to sell off the profitable financial services operations.

Mr Doris said S. G. Warburg would be asked to advise on *the eventual sale of a minority* stake in the financial services group, which last year recorded an operating profit of L175bn ($101m), against L163bn in 1993. Turnover rose to L1,192bn, compared with L981bn a year earlier.

Comparatively few financial services operations are quoted on the Italian stock market. Last year Mr Carlo De Benedetti floated Finanza & Futuro, a financial services group, but the sale attracted limited interest from small investors. Mr Doris said yesterday he believed the Fininvest operations would be more attractive because of the weighting towards life insurance activities.

Mr Doris has a 24 per cent stake in Fininvest Italia, the main vehicle for the financial services businesses, and minority stakes in a number of other subsidiaries.

Danish bank expects to recover in 1995

By Hilary Barnes in Copenhagen

Bikuben, the savings bank which made a DKr1.3bn ($239.4m) loss in 1994, expects to make a strong recovery this year, Mr Aage Spang-Hansen, *the supervisory* board chairman, told the annual meeting of shareholders yesterday.

Denmark's third ranking bank with assets of about DKr85bn, is responding to plans to improve core earnings (before unrealised capital gains or losses on the securities portfolio) by cutting costs and refocusing activities.

Earnings would increase by about DKr200m to DKr550m in 1995, Mr Spang-Hansen said. The bank's aim is to lift core earnings to DKr750m by 1997.

The cost-cutting includes a reduction in the workforce by 600 to 4,300 this year.

The savings bank's accounts were burdened by large bad loss provisions in 1993 and 1994, and although they came down to DKr1.02bn in 1994 from DKr1.69bn in the previous year, the level of provisions was still just over 2 per cent of loans and guarantees.

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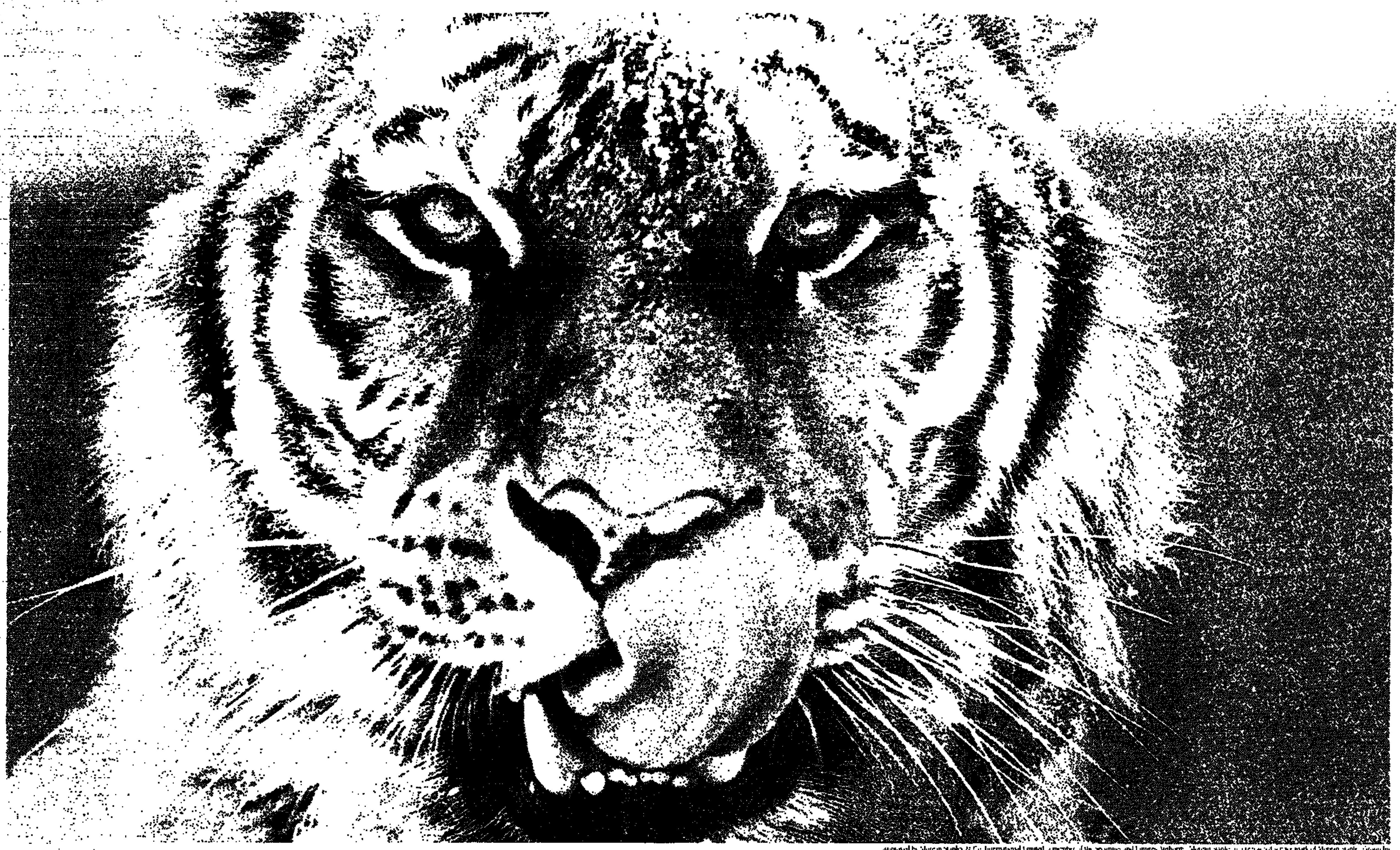

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INTERNATIONAL COMPANIES AND FINANCE

Head of Apple's PC unit set to resign in shake-up

By Louise Kehoe in San Francisco

Apple Computer is expected to announce a broad reorganisation of its operations and the resignation of one of its top executives, as the company struggles to maintain its momentum in the personal computer market.

Mr Ian Diery, Apple's number two executive, in charge of the company's personal computer hardware division which represents the lion's share of Apple's revenues, has resigned, according to company insiders.

Apple said it had "nothing to announce" and declined further comment. The company is, however, expected to unveil its new structure later this week.

Apple will adopt a "functional structure" with four divisions, replacing its current product line divisions.

The new structure will include a research and development division responsible for all new products.

A new marketing and solutions division will be divided into groups addressing each of Apple's primary market segments: education, home and business.

Manufacturing and distribution of all products will be grouped in another new division.

Worldwide sales will also become a separate division.

The company currently comprises four main divisions: personal computers, headed by Mr Diery; business systems, which makes larger "server" computers; Applesoft, which is responsible for software; and personal interactive electronics, which makes the Newton personal digital assistant. Apple also has a subsidiary, Claris, which develops applications software, such as word processors and database programs.

Mr Diery is said to have made a personal decision to leave Apple because the reorganisation would have narrowed his responsibilities.

As executive vice-president and general manager of the personal computer division, Mr Diery has been in charge of the development, manufacturing, marketing and sales of most of the company's computers.

Apple's 1994 share of the world PC market dropped to 8.1 per cent from 9.4 per cent the year before, according to International Data Corporation, a US market research group.

Power Financial climbs 35%

By Robert Gibbens in Montreal

Power Financial, the financial services arm of Power Corp of Canada, posted a 35 per cent rise in profits in the last quarter of 1994, mainly because of strength in its life insurance unit, Great-West Lifeco.

Total consolidated revenues rose to C$2bn (US$1.4bn) from C$1.4bn, and net income increased to C$78.4m, or 87 cents a share, from C$57.9m, or 63 cents, a year earlier.

Net profit for the year climbed 36 per cent to C$273.1m, or C$3.01 a share, from C$200.5m, or C$2.24, in 1993. Revenues were C$6.7bn against C$5.8bn.

The 1994 figures include special gains of C$4.9m, compared with C$1.8m.

Contributions were higher from Investors Group, a big unit trust distributor, and from Pargesa, the European industrial and communications holding company jointly controlled with Belgium's Frère family.

PFC plans to repurchase up to 5 per cent of its issued shares through the market.

The parent company, through its communications unit, has raised its stake in Southam, Canada's biggest newspaper group, to 21.39 per cent from 19.39 per cent and said it may buy more Southam shares.

Power Corp and Hollinger, Mr Conrad Black's newspaper holding company, plan to oppose a Southam shareholder rights plan that would prevent any single holder owning more than 23.5 per cent. The plan will be voted on at Southam's annual meeting on April 25.

RPR muscle drug ends trial

By Richard Waters in New York

Rhone-Poulenc Rorer, the US-based pharmaceuticals company, said a final trial of its drug for sufferers with Motor Neurone Disease, known in the US as Lou Gehrig's disease, had confirmed that the drug was the first to show an impact on the disease.

However, an initial analysis of the test showed only that the drug led to "an overall increase in survival of approximately three months", the French-owned company said.

It added that the trial had not revealed "a statistically significant effect on the rate of muscle function deterioration" associated with the disease.

RPR did not disclose further results, but said it would publish complete data in May at a meeting of the American Academy of Neurology.

Although apparently confirming the effectiveness of the drug, the results will dampen some of the enthusiasm which followed the findings of an earlier, second-phase trial of the drug.

This led to hopes in some quarters that it would prove more effective in tackling the disease, which causes a progressive deterioration in the muscles.

The company said it planned to file applications with regulators in Europe, the US and other countries from July this year onwards to market the drug.

TCI inches back into the black for 1994

By Tony Jackson in New York

Tele-Communications Inc, the largest US cable-TV operator, inched into the black for the whole of 1994, with net profits of $47m against a $9m loss the year before.

Operating cash flow, the measure of performance preferred by the cable industry, fell 3 per cent to $1.8bn as a result of government-imposed curbs on cable rates.

Group turnover for the year, helped by the acquisition of Liberty Media, rose 19 per cent to $4.9bn.

In the final quarter, sales and cash flow rose 17 per cent to $1.5bn and 5 per cent to $459m, respectively.

Mr John Malone, president and chief executive, said that 1994 "was an enormous challenge for the cable industry and TCI as the full impact of rate regulations took effect during the year and produced a negative impact on cash flow. The year was, however, marked by strong fundamental growth in our cable business."

In the course of the year, TCI formed a joint venture with Sprint, the long-distance telephone company, and other cable groups to bid for US mobile phone licences. The venture was the highest bidder in the auction conducted by the US government, committing itself to paying $2.1bn.

The consortium has said it would invest $4.4bn in total over the next three years.

TCI said that at the year-end it had provided basic service to 11.7m customers, a 9 per cent increase.

Internal growth, as opposed to acquisitions, had run at 5 per cent.

● Mr Malone said yesterday he had had no contact with Matsushita, owner of Hollywood's MCA studio, and that TCI had no interest in buying MCA, Reuter reports from New York.

Reports that Matsushita is in talks with Seagram, the international drinks group, about selling all or part of its MCA entertainment business have stimulated speculation that other bidders might appear for MCA.

Alcatel fights to steer out of storm

Leadership question is crucial for embattled group, writes John Ridding

Since Mr Pierre Suard took over as chairman of Alcatel Alsthom in 1986, the annual board meeting to approve the accounts has tended to follow a familiar pattern.

Several captains of French industry and international heavyweights, such as Mr Rand Araskog of the US conglomerate ITT, gather in Paris, discuss a sharp increase in profits and then leave Mr Suard to announce the results.

But today circumstances are very different. The board is faced with a 40 per cent fall in profits, the first decline in the company's history. More seriously, Mr Suard will not be attending.

A magistrate investigating allegations of corruption by the chairman has barred him from exercising his functions at the transport, telecoms and engineering group, built by Mr Suard into France's second biggest industrial concern.

Such a radical change reflects the turmoil which has engulfed Alcatel over the past 18 months.

More is likely to follow. By a quirk of the calendar, a Paris court weighing an appeal by Mr Suard will also start its hearings this morning.

Unless it completely rejects the sanctions against Mr Suard, which stem from allegations of fraud and overbilling of France Télécom, further upheaval lies ahead.

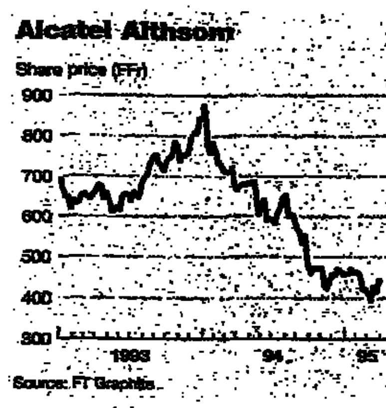
The critical questions are how quickly the group responds to its difficulties and under whose leadership.

As one investor puts it: "What matters now is not how Alcatel got into this situation, but how it gets out. The sooner the problems are resolved, the better."

For some observers, this involves replacing Mr Suard. "To stop the decline and to restore confidence it is necessary to name a new chairman", says Mr Elie Cohen, director of the CNRS research institute.

Much depends on the appeal court's decision. Its members have three options: to maintain the magistrate's ruling; to relax the terms of the injunction, allowing Mr Suard to return to work; or to reject the probes and the sanctions against Mr Suard.

In all but the last case, pressure to replace Mr Suard is likely to grow.



Pierre Suard Chairman

"It is a question of practicality," says one industry analyst. "Alcatel cannot go on under this cloud."

Mr Suard, who has protested his innocence, is determined to return. Since being barred from the group last month, he has even taken to the airwaves to state his case and to criticise the practices of the judiciary.

"I am innocent, my group is innocent," Mr Suard told a television audience.

The longer he is away, however, the less secure his position. The board, which gave a vote of confidence in Mr Suard after the magistrate's ruling, is expected to discuss its options at today's meeting.

Many of the French directors, which include Mr Guy Déjouany of Générale des Eaux, the utility, and Mr Jacques Friedmann of UAP, the insurer, are caught between the need to resolve the situation and the difficulty in deserting a peer.

Mr Araskog – who, like other investors, has seen his investment in Alcatel fall by 50 per cent since 1993 – is thought to favour a clean break. ITT declines to comment on the issue, except to say that the chairman "expressed his feelings very clearly" at a board meeting last month.

A decision is not expected immediately, and not before the judgment of the appeals court, which may take several days. But a possible scenario, should Mr Suard not obtain satisfaction, involves a further board meeting within the next few weeks and the appointment of a caretaker chairman to provide time to arrange an orderly succession.

Speculation concerning possible replacements has ranged from Mr Pierre Bilger, head of GEC-Alsthom, the engineering joint venture with GEC of the UK, to a host of external candidates.

Not surprisingly, Alcatel dismisses discussion of alternatives and condemns the actions taken against its chairman.

According to the company, operations are running smoothly under the guidance of Mr François de Laage de Meux, managing director.

A series of deals in the last few weeks, from the sale of its US copper wire operations to the purchase of a stake in the Euronews TV channel, would seem to support their description of business as usual.

However, in many of Alcatel's biggest markets business is not as usual. Witness the deregulation of the European telecoms sector and the end of tight relationships between suppliers and state telecoms operators, particularly in Germany.

Losses at Alcatel's German subsidiary were a big reason for the fall in profits last year, to about FFr4bn ($833m) from FFr7bn.

Alcatel has responded, if belatedly. Restructuring the group into product, rather than geographical centres, is improving efficiency. Establishing a seven-member executive committee has increased the flexibility and speed of decision-making, while a restructuring, involving plant closures and job losses, is expected to return the German operations to profit next year.

The company's strong international drive provides protection against the breach of traditional European strongholds. About 19 per cent of Alcatel's telecoms equipment sales are secured in China, almost as much as in France.

The company also possesses trumps in technology. Its digital telecoms switching and broadband transmission devices are being used in many of the trial services for multimedia services. "They are well positioned in what will be lucrative high value-added markets," says one telecoms analyst.

But capitalising on such assets is rendered much more difficult by the management crisis. At a time when the company needs a firm hand on the tiller, its captain has been marooned. Without a new helmsman or Mr Suard's return, a flagship of French industry will struggle to leave the doldrums.

French Socialist party officials yesterday rejected reports that the party had received funds from former executives of GEC-Alsthom between 1989 and 1990, writes John Ridding in Paris.

Three former executives confirmed on Monday that they had contributed FFr7.5m ($1.6m) to the financing of the Socialist party during that period, according to a newspaper report.

The disclosures came during a hearing as part of a probe into illicit political financing headed by Mr Renaud van Ruymbeke, an investigating magistrate.

The investigation stems from an enquiry into a 1990 contract with Dutch national railways for 38 locomotives.

In a statement issued on Monday, GEC-Alsthom said it had provided the French judicial authorities with all the information and documents in its possession concerning the commissions mentioned in recent press articles.

The Anglo-French group said the information supplied confirmed its previous statement that no commissions were paid directly or indirectly to either Dutch politicians or civil servants, or to executives of Dutch railways.

Prices for electricity determined for the purposes of the electricity pooling and settlement arrangements in England and Wales

1/2 hour period ending	Provisional Prices for Trading on 05.04.95: Pool purchase price £/MWh	Final Prices for Trading on [illegible]: Pool purchase price £/MWh	Pool selling price £/MWh
0030	8.20	8.79	8.79
0100	8.18	8.87	8.87
0130	8.91	8.97	8.97
0200	8.94	8.97	8.97
0230	10.00	8.89	8.89
0300	7.03	8.87	8.87
0330	8.94	8.87	8.87
0400	8.93	8.79	8.79
0430	8.92	8.18	8.18
0500	8.90	8.18	8.18
0530	8.91	8.93	8.93
0600	8.91	8.85	8.85
0630	8.94	8.79	8.79
0700	10.35	9.04	9.04
0730	10.62	10.28	12.14
0800	18.99	11.20	13.29
0830	45.38	14.89	17.02
0900	45.40	16.71	19.33
0930	29.91	18.79	21.48
1000	29.92	18.76	21.45
1030	28.81	13.64	16.25
1100	21.93	16.77	19.43
1130	21.94	14.93	17.88
1200	21.94	20.51	23.84
1230	21.92	20.26	23.30
1300	21.90	18.90	21.64
1330	18.68	12.63	14.99
1400	18.98	15.14	17.40
1430	15.57	11.65	13.75
1500	15.57	10.37	10.37
1530	15.57	10.15	10.16
1600	14.45	10.55	10.55
1630	15.57	12.13	12.13
1700	16.47	15.35	18.44
1730	16.47	17.92	21.16
1800	15.57	22.41	26.84
1830	14.12	32.70	38.96
1900	10.47	47.78	54.47
1930	10.72	43.42	49.16
2000	23.83	24.51	28.01
2030	45.38	11.18	13.32
2100	45.38	10.27	12.17
2130	26.03	9.09	9.09
2200	16.16	8.96	8.96
2230	13.44	8.79	8.79
2300	10.82	8.79	8.79
2330	10.35	8.79	8.79
2400	8.94	8.78	8.78

Prices are determined for every half-hour in each twenty-four hour period. Prices are in pounds per megawatt-hour, rounded to two decimal places. To convert prices to pence per kilowatt-hour the decimal point should be moved one place to the left, eg £16.86/MWh becomes 1.686p/kWh. Provision for the determination of pool prices is made in the Pooling and Settlement Agreements which govern the operation of the electricity pool in England and Wales. The Pool Purchase Price is the basis of the majority of payments made to generators in respect of electricity traded through the pool. The calculation of pool prices is a highly complex process the product of which is subject to revision or correction (and sometimes major alterations) until final pool prices are determined approximately twenty-four days after the day of trading. Accordingly, due to the possibility of their revision and/or correction, no reliance should be placed upon provisional pool prices for any day being the same as final pool prices for that day. Final pool prices are also capable of revision. Pool Selling Price is the price paid by purchasers of electricity under the pool trading arrangements. It is dependent upon the determination of Pool Purchase Price. Further information on pool prices is provided on behalf of the Pool by Energy Settlements and Information Services Limited. Anyone wishing to receive such information should telephone 0115 945 6789 between [illegible] and 5:15pm Monday to Friday
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INTERNATIONAL COMPANIES AND FINANCE

San Miguel plans $1.5bn spending

By Edward Luce in Manila

San Miguel, the Philippine beer and soft drinks company, says it has earmarked 40bn pesos ($1.5bn) for capital expenditure between 1995 and 1997 to bolster its share of the Asian beer market.

The company, which recently announced a 41 per cent net profit increase to 4.98bn pesos for 1994, plans to buy a second brewery in China in Baoding, near Beijing, to add to its existing plant near Guangzhou.

The company will also buy a glass bottle plant in Haiphong, Vietnam.

The 40bn peso outlay is the second tranche of a seven-year expansion programme which is intended to catapult San Miguel to a dominant position in the east Asia beer market.

The first 36bn peso phase, which was launched in 1988, resulted in a joint venture with Delta Djakarta in Indonesia and a 50:50 joint venture with Nestlé, the Swiss multinational, in the Philippine soft drinks and ice-cream market. The company also expanded its share of the Hong Kong beer market to 50 per cent, in spite of selling its largest Hong Kong brewery last year.

"San Miguel is in a very strong position to expand overseas," said Mr Alex Pomento, a research analyst at Barings ING in Manila. "Only 15 per cent of the company's revenues come from its regional sales but that should rise to 30 per cent by [the year] 2000."

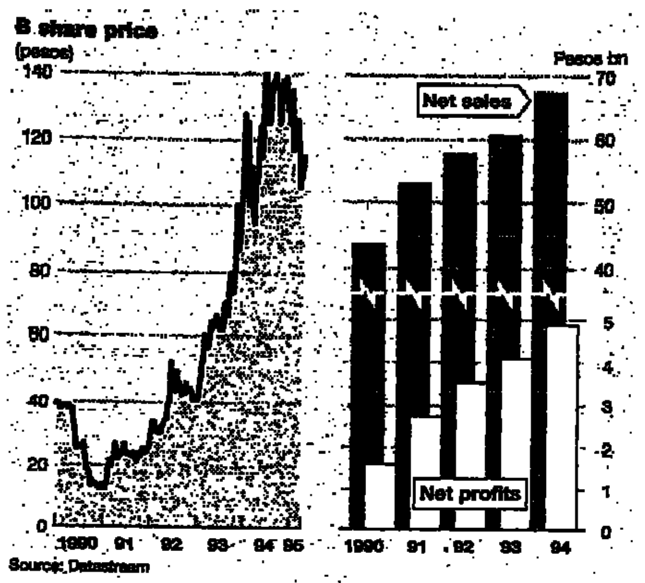
In the longer term, the Philippine consumer giant, which has a 91 per cent share of the country's beer market, said it planned further joint ventures with foreign companies as well as establishing a foothold in India.

"San Miguel is probably the Philippines' most recognised brand name," said Mr Pomento. "It is also one of the most popular stocks among foreign investors, although it has probably traded at too high a multiple to earnings in the last few years."

At a price/earnings ratio of 27, San Miguel is still considered relatively expensive, although the multiple has dropped from the high 30s since 1993.

However, the Philippine market, which is 70 per cent consumer driven, is considered an ideal launch pad for San Miguel's expansion plans.

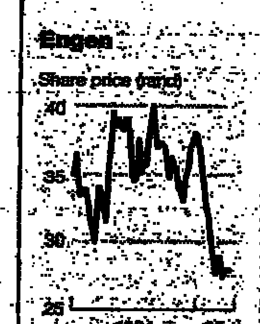
San Miguel's "B" shares – which, unlike San Miguel "A", are open to foreign buyers – have remained quiet at 117 pesos since the announcement. Analysts say the market is awaiting an upturn in Philippine consumption before rallying to San Miguel.



Source: Datastream

NEWS DIGEST

Engen income falls sharply to R90m at halfway



Source: Datastream

Engen, the South African energy company, was hit by a lower refining margin and problems with its main refinery, resulting in a sharp drop in attributable income to R90m ($25m) from R176m for the six months to the end of February, writes Mark Suzman in Johannesburg. Increased domestic sales resulting from higher economic growth in South Africa led to a 3.7 per cent rise in gasoline sales and a 4 per cent rise in diesel, pushing overall turnover to R4.27bn from R4.03bn for the same period a year ago.

However, lower international margins and a drop in crude throughput due to operational problems in the company's newly-upgraded refinery in Durban, meant that operating income before inventory effects and exceptional items dropped 33.7 per cent to R187m from R282m a year ago. Exports to sub-Saharan Africa also dropped sharply.

Mr Rob Angel, chief executive, said it had been a "tough time" but that he believed the worst was over and that the group was making progress with its overall restructuring plans.

Italian shipbuilder doubles net profit

Fincantieri, Italy's state-controlled shipbuilder, more than doubled net profit to L7.2bn ($4m) in the calendar year 1994, against a profit of L3bn in 1993, writes Andrew Hill in Milan. Consolidated profit reached L9.7bn on turnover of L2,500bn.

The group, which is one of the world's leading builders of cruise ships, said that extraordinary charges related to a drastic restructuring programme had held back overall profit, but attributed the rise to the reduction of costs and increase in productivity at the company.

Mr Corrado Antonini, chairman, explained that static defence spending had obliged the group to seek out new business in the civil sector – for example in the production of fast ferries – which took advantage of military construction skills.

SA mining groups face damages claims

Randgold, the South African mining group, and its management company, Fraser Alexander, said they were preparing for claims of up to R70m ($19.6m) in damages in connection with the bursting of a slimes dam controlled by the company in the town of Merriespruit last year, writes Mark Suzman.

The announcement follows a decision by a judge last week to declare six of the companies' employees criminally liable for the disaster which took place in February 1994, when slimes from the broken dam, collected from Randgold's Harmony gold mine, washed away houses and streets in Merriespruit, causing widespread damage and killing 17 people.

Fraser Alexander and Harmony have set up a R10m fund to facilitate settlement of claims and said that liability would be equally apportioned between the two companies. A spokesman for Fraser Alexander said expert opinion was that total claims would not exceed R70m and that the group had sufficient insurance cover and other resources to meet that amount.

Harmony made a R28m provision during the 1994 financial year for costs arising from the disaster, but analysts are concerned that, given the mine's marginal viability at current gold prices, successful damage claims from victims arising out of the judge's decision could seriously damage the mine's operating viability.

Danish oil group will pay first dividend

Dansk Olie og Naturgas, Denmark's state oil and natural gas distribution company, will pay a dividend – of DKr215m ($39m) – for the first time since it was set up in 1974, after making a profit of DKr619m in 1994, the group's best result to date, writes Hilary Barnes in Copenhagen. In 1993 it made a profit of DKr532m.

The group's operations have been profitable for many years, but it has carried heavy debts from investment in a network for distribution of natural gas from the Danish sector of the North Sea, and these have previously prevented it from paying a dividend to the state.

Net debt was reduced last year by DKr1.1bn to DKr3.9bn. Group sales increased to DKr6.90bn from DKr6.77bn in 1993, of which DKr2.35bn was export income from sales of natural gas to Sweden and Germany.

Alumax and Alcan complete deals

Two North American aluminium groups, Alumax, third largest of the US producers, and Alcan of Canada, have completed deals, writes Kenneth Gooding, Mining Correspondent, in London.

Alumax has sold some of its Estalco smelter in Maryland and its Intalco smelter in Washington state to a consortium led by Mitsui of Japan, which paid $148m for a further 14 per cent stake in the smelters. Alumax will record a first-quarter pre-tax gain of more than $100m from the sale, which leaves it with 61 per cent of the smelters and operating control. The consortium now owns 39 per cent.

Alcan has sold its metals distribution business to Rio Algom, another Canadian group, for an undisclosed sum as part of its policy of selling "downstream" operations.

Germany introduces 'real-time' settlement

German stock market authorities are introducing "real-time" settlement – the delivery and payment of securities transactions – from tomorrow in order to reduce settlement risks to a minimum, writes Antonia Sharpe in London.

Real-time settlement means that the securities and payment in D-Marks are transferred immediately and with binding effect from the account of the DKV, the German central securities depositary, or the account-holder at LZB Hessen to the account of the other party. LZB Hessen is the regional Bundesbank office in the state of Hesse.

MIM shares climb 5% in wake of Musto offer

Shares in MIM, the Australian mining group, rallied by about 5 per cent yesterday to A$2.02 in the wake of Placer Dome's US$804m offer for International Musto, writes Nikki Tait. MIM bought into Musto's Bajo de la Alumbrera copper-gold project for US$130m last year – of which US$120m was the development fee. Its interest is 50 per cent, with International Musto retaining the remaining half.

Analysts said that the Placer bid for International Musto appeared to value the Alumbrera interest more favourably than had previously been the case in calculations of MIM's rating. The Brisbane-based company's share price has also been depressed recently by the industrial unrest and stoppages at some of its Queensland operations.

News chief plans talks on future of Ansett

By Nikki Tait in Sydney and agencies

Mr Ken Cowley, chief executive of News Limited, the Australian newspaper arm of Mr Rupert Murdoch's News Corporation media group, said yesterday that he is to meet federal government representatives for talks over the future of Ansett, the Australian airline in which News Corp has a 50 per cent stake.

Mr Cowley's comment was a side issue amid the local furore over Mr Murdoch's plans to set up a rugby "super-league" in Australia, and no one at News' Sydney offices was available to elaborate on the nature of the government discussions.

However, there has been speculation recently that News is seeking to dispose of its interest in Ansett, one of two national carriers. Air New Zealand and Brierley Investments, a significant shareholder in Air NZ, have been mooted as potential buyers.

Last year, Air NZ was blocked from flying internal Australian routes when the Australian government unilaterally revoked an "open skies" arrangement between the two countries, just days before it was due to come into effect.

The remaining 50 per cent of Ansett is held by TNT, the transportation group, which has said in the past that it is not likely to be a seller, unless an extremely attractive price is offered. Yesterday, it declined to comment on suggestions that a proposed restructuring of Ansett's ownership structure could see its stake rise to 51 per cent.

● BHP, the Australian resources group, and Canada's Westcoast Energy said yesterday that they were proceeding with a environmental impact study for a 700km gas pipeline from Victoria to Sydney, in New South Wales. They said a final decision on the project would be made in mid-1996, and that the pipeline could be in operation during 1997.

Restrictions on the interstate sale of energy are gradually being lifted in Australia, and "free and fair trade" in natural gas within and between states is due to come into force by July 1 1996, providing impetus for the project.

Separately, BHP told an Adelaide petroleum conference that talks to renegotiate the terms of a production-sharing agreement over Vietnam's offshore Dai Hunh oil field could continue into next year.

Mr Mike Baugh, president of BHP Petroleum, Australia and Asia, said that talks with the Vietnamese government had started but would "probably take the rest of this year and maybe [continue] into next year".

Bremen set to sell stake in energy arm

By Michael Lindemann in Bonn

The city state of Bremen, Germany's smallest and poorest Land (state), yesterday said it would sell a 49.9 per cent stake in its municipal energy distribution company, or Stadtwerke, for DM684m ($498m).

The money will go in part to pay for the 1993 rescue of the Klöckner steel mill and to fill other holes in Bremen's finances. Bremen will keep the outstanding 50.1 per cent.

Veba, Germany's second biggest utility, will take a 24.9 per cent stake in the company for DM342m while Ruhrgas, the German gas distributor, and Tractebel, the Belgian utility, will each take 12.5 per cent for DM171m.

The three offered the highest prices following bids by 14 companies.

The deal has still to be approved by the state parliament and it is unclear whether the Social Democratic party, the largest grouping, can find a majority to back the sale.

State elections have been called for May 14, following the recent collapse of the ruling three-party coalition. The ownership of the Stadtwerke is bound to be a central issue, with three of the biggest parties in parliament all supporting slightly different proposals.

"How forces are deployed in parliament is still unclear," said Mr Klaus Sondergeld, a spokesman for the city. The deal, if it goes ahead, should be completed by the end of May.

Mr Sondergeld said the Klöckner rescue cost Bremen more than DM200m, a sum it was prepared to pay to save about 8,000 jobs. These jobs depended directly and indirectly on the steelworks which were finally taken over last year by Sidmar, the Belgian steel group.

Since the rescue could not be funded from the city's budget, it decided to sell a stake in the Stadtwerke.

Most German cities have agencies for the distribution of electricity, gas and water, and which have long-term contracts with Germany's utilities.

Many are losing money because of growing pressure from competitors who are trying to break up the cities' monopolies.

Another reason why Bremen is pressing ahead with the sale of the Stadtwerke is because it has the highest per capita debt of any of the German Länder. Its 685,000 inhabitants have run up a debt of DM17bn.

Slovakia clips investors' wings

State plans to curb funds' influence in industry, writes Vincent Boland

The government of Slovakia plans to curb the influence of the country's investment funds, the main investors in private industry, as it prepares for a new round of privatisations, tentatively scheduled for July.

The proposed moves show the government is determined to keep a tight rein on industry in future privatisations, against the growing influence of private investors. This has led to concern that some of the benefits of privatisation may be undermined.

The tighter regulations are designed to make Slovakia's 166 investment privatisation funds more like portfolio managers and less like strategic investors in industry.

The IPFs were set up to invest in state companies being privatised through the vouchers-for-shares scheme, and are owned by hundreds of thousands of small investors. The regulations are being drawn up as the IPFs seek to recover their momentum following a series of unexpected developments this year.

In January, Nomura International, the dominant shareholder in VUB Kupon, the largest Slovak IPF, tried to break up the fund.

Nomura secured approval at a controversial meeting of VUB Kupon's shareholders on January 23 to take over about one-third of the fund's assets. It is currently awaiting finance ministry approval for the move. Trading in VUB Kupon's shares on the Bratislava bourse has been suspended since the meeting, depriving the market of probably its most liquid stock.

In late February, the finance ministry ordered VUB Invest, which manages the portfolios of VUB Kupon, to stop trading in the underlying assets of the fund while it considered the outcome of the meeting. That order deprived the market of one of its most active traders.

Last month, the ministry shut down PSIPS, another big but unquoted investment fund, and put it into liquidation, charging PSIPS executives with failing to look after the interests of small shareholders. PSIPS was unable to honour a guaranteed return of 2,000 per cent it promised to investors when it was established.

In response to these developments, ministry officials say they want to cut to 10 per cent from 20 per cent the maximum stake an IPF can take in companies to be sold in the next round of privatisations.

They may also cut to 5 per cent the voting rights an IPF can exercise in a privatised company, regardless of the size of its stake.

The government says these moves will give a voice to a greater number of shareholders in a privatised company, and ensure no one investor is unduly dominant.

Mr Jozef Magula, deputy finance minister, said IPF managers had become too powerful in the running of companies and were ignoring the interests of their own small investors.

"The facts are that the funds are controlled by management and not by shareholders," he said. He maintained there was a conflict of interest between an IPF's role as a portfolio manager and its desire to influence the management of a company.

Fund managers acknowledge the rules governing IPFs need to be clarified, but many believe the proposed changes reflect alarm among big, partly privatised Slovak companies at the power of the IPFs to hire and fire industry bosses.

"Some of the funds are beginning to be real owners [of privatised industry] and are firing bad managers, and some of those bad managers are friends of the government," said Mr Tom Grey, an economist at DanInvest, a Bratislava fund manager.

Much of Slovak industry, especially the big companies, which are still mainly state-owned, has close ties to Mr Vladimír Mečiar, the prime minister, and his populist Movement for a Democratic Slovakia party.

Reflecting the government's desire to retain control of companies which may be privatised, the maximum stake in any one entity to be included in the next round of privatisations will be 46 per cent, compared with up to 97 per cent in the first mass privatisation round in 1992. The average stake to be sold will be 33-35 per cent, according to Mr Stefan Gavornik, chairman of the National Property Fund, the state holding company.

Fund managers fear the new limits will do nothing more than allow the state to replace the IPFs as the dominant shareholder in "privatised" Slovak industry. They are also concerned it could deter foreign investors.

Mr Martin Cabadaj, executive director of Creditanstalt Securities in Bratislava, said the likely concentration of majority control in state hands after the new round of privatisations would tilt the balance of corporate governance away from private shareholders.

It could also act as a barrier to restructuring Slovak industry, especially where this entails cutting jobs. Mr Gavornik suggested the NPF would not sanction job losses. Unemployment in Slovakia stood at 14.8 per cent at the end of 1994.

IPFs are also angered by a proposed crackdown on options and off-market share trading. This is likely to lead to the closure of the Bratislava options exchange, which trades one-day forward contracts and is the most popular of the country's three securities markets among big traders.

The funds are trying to ensure that their influence is not entirely eroded when the new privatisation round begins, but they may be fighting a losing battle. "We don't have much influence," one fund manager conceded.

The travails of VUB Kupon and PSIPS also add to the uncertainty in which the IPFs operate. Whether the changes will be good for ordinary Slovak investors will only become clear after more privatisation.

Largest Slovak investment fund managers

Fund	Investors	Funds under management (Kc m at 30.09.94)
VUB Invest	501,000	14,592
Cassoviainvest	169,000	5,336
PSIPS	n/a	4,000
Capital	188,000	3,962
PSIS	136,000	3,907
Harvard	73,500	3,038
Regioninvest	52,000	1,012
Slov Coupon	50,500	950
Karpaty	35,300	848
Coopex Invest	38,000	828
Creditanstalt	27,500	758

Source: Trend (Slovak economic weekly)

French bank sells two London branches

By Andrew Jack in Paris and Alison Smith

Crédit Lyonnais, the loss-making French bank, has continued its withdrawal from UK personal banking with the sale of two London branches to the Bank of Ireland.

One of the two – in Lower Regent Street – was the first London branch opened by any overseas bank.

The transfer will take place next month, when the staff and premises will become part of Bank of Ireland's UK retail operation. The deal is thought to involve deposits of almost £100m ($163.4m), and will take Bank of Ireland's UK branch network to 27.

Bank of Ireland believes the branches' focus on international trade clients and French expatriates will fit well with its emphasis on niche markets. Crédit Lyonnais' departure from UK personal banking was announced last autumn, when it decided the number of personal customers was too low to justify the investment. "It was neither profitable nor interesting enough for us," a bank official said in Paris.

However, it continues its operations as a banker to small and medium-sized UK companies with a European outlook, as well as its wholesale and capital markets activities.

Walt Disney names new financial chief

Walt Disney, the US entertainment group, has appointed Mr Stephen Bollenbach as senior executive vice-president and chief financial officer, AP-DJ reports from Burbank, California.

Disney said Mr Bollenbach, who will be responsible for all financial affairs of the company worldwide, was chief executive and president of Host Marriott, the US hotels group. He succeeds Mr Richard Nanula, who in November was named president of Disney Stores worldwide.

From 1990 to 1992, Mr Bollenbach was chief financial officer for the Trump Organisation, where his primary responsibilities involved refinancing various assets and companies owned by Mr Donald Trump.

Smuggling crackdown helps lift Tabak

By Vincent Boland in Prague

Pre-tax profits at Tabak, the Czech tobacco company controlled by Philip Morris of the US, more than tripled in 1994.

The company benefited from a crackdown on cigarette smuggling, a fall in bad debt provisions and the the opening of a new tobacco processing facility.

Tabak said profits before tax rose to Kc1.74bn ($60m) last year from Kc495.9m in 1993, on revenues up to Kc8.88bn from Kc6.3bn. Profits after tax advanced to Kc932m from Kc46m. Extraordinary provisions fell to Kc138m from Kc585.6m a year earlier. Profits for 1993 had been depressed by bad debts and uncollectible receivables stemming from Tabak's days as a communist-era monopoly producer.

Profits were also boosted by higher domestic sales, a rise in exports to Slovakia and other countries in the region, and the opening of a $32m tobacco processing facility last year at Tabak's headquarters in the town of Kutna Hora.

The crackdown on smuggling followed the introduction last year of compulsory fiscal stickers on cigarette packs in an attempt by the Czech government to counter lucrative cross-border trafficking.

Mr Michael Parsons, of Philip Morris Central and Eastern Europe, said the the US company had been "quite vocal in calling on the government to address the contraband problem", and that the introduction of fiscal controls had been successful.

Tobacco companies have spent heavily expanding into the region in the past five years.

Tabak had a near-monopoly of the then-Czechoslovak tobacco products market when Philip Morris bought it in 1992, and now controls some 75 per cent of the Czech market.

The US company has paid $367m to buy 77.4 per cent of Tabak, modernise its production capacity and expand its range of brands. Its total investment in the company is set to reach $400m.

Surge in orders drives sharp rise at Dassault Aviation

By John Ridding in Paris

Dassault Aviation, the French aerospace group, has announced a solid rise in profits for 1994, with the net result for the year at FFr328m ($68.4m), compared with FFr245m in 1993.

The result was achieved on consolidated sales of FFr12.6bn, compared with FFr13.8bn in 1993.

Just less than half the sales came from the export market, while 41 per cent of revenues were derived from commercial activities, the company said.

The year showed a strong increase in the order book. According to Dassault, new orders rose 38 per cent to FFr18bn. Of these, about FFr11bn came from military sales, FFr5.9bn from civil aerospace activities, and FFr1.1bn from other businesses.

In the military sector, the order book benefitted from a contract for 12 Mirage 2000-5 combat aircraft from Qatar. The contract is worth about FFr3.5bn.

Mr Serge Dassault, chairman, also referred to the progress of the Rafale combat aircraft programme. He said the first aircraft should be delivered in 1997.

In the civil sphere, the company has seen strong demand for its Falcon business jets.

Last year, Dassault sold 45 Falcons, compared with 28 the previous year and 22 in 1992.

The company says it has between 45 and 50 per cent of the market for top-range executive jets, a market which analysts say is reviving after a period of sharp contraction.

Reflecting the improved performance and outlook, the company announced it was raising the dividend. The increase takes the payout to FFr8.50 a share from FFr7 in 1993.

COMPANY NEWS: UK

Amersham disposes of Hy-Lite to E Merck

By Motoko Rich

Amersham International, the health science group, has sold its environmental assays division for more than £5.5m ($8.8m).

E Merck, the German pharmaceuticals and chemicals company, has bought Hy-Lite, the rapid method microbiological testing business. The sale includes future products under development and intellectual property rights.

Amersham has also sold LabM, its traditional microbiological testing business acquired in 1989, to an undisclosed purchaser.

The sales conclude the announced withdrawal from the environmental assays sector. Mr Kirk Stephenson, finance director, said: "We did not feel we were well placed to exploit the technology because our customer base in environmental assays is so different from the customer base in our other businesses."

Environmental assays are used by food manufacturers and water treatment companies. Amersham's core businesses are life sciences, which supplies chemical reagents to laboratories, and healthcare, which produces radioactive products for diagnosis, pain therapy and cancer treatment.

The combined consideration for the disposals is £5.5m, with an earn-out based on sales of Hy-Lite and future products arising from 1997-98. Amersham expects a pre-tax gain of £2m in 1994-95, after asset write-offs, provisions and recognition of the £1.3m goodwill previously written off on the acquisition of LabM.

Flextech restructure

Flextech, the media group, is believed to be on the verge of raising between £90m and £100m ($160m) in a capital restructuring programme which will bring in two new shareholders.

The company is in advanced negotiations with Hallmark Entertainment of the US and US West, the American telephone company with cable television interests in the UK.

If the deal is finalised, Hallmark and US West would each take a 10 per cent stake in Flextech, which last year bought a 20 per cent stake in HTV, the ITV company for Wales and the west.

Dalgety £11.8m buy

Dalgety, the food and agribusiness group, has bought PAC, a privately owned food ingredients business based near Milan, Italy, for £11.8m ($19m) cash. PAC has turnover of £14m and assets of £5m.

It supplies seasonings and mixes to the Italian processed meat and pasta industries and will become part of Dalgety Food Ingredients.

Thames Water sale

Thames Water has completed the sale of its Permutit water treatment businesses to US Filter Corp for £6.3m ($10m).

For the year to March 31 1995, the companies had a combined turnover of £13m with operations in the UK, Australia, New Zealand and the United Arab Emirates.

The Permutit operations in Egypt and South Africa do not form part of the deal.

Purchase of LeRoi and Fabex will double its share of the market

£39m US expansion for Siebe

By Tim Burt

Siebe, the controls group, yesterday announced a big expansion in North America with the acquisition of its first US fluid systems business and a compressor manufacturer that will double its market share in the region.

The group said its agreed takeover of LeRoi, the Ohio-based compressor company, and Fabex, a Michigan components supplier, would strengthen its global presence in those industries. It is paying £20.6m ($33m) for LeRoi and £17.2m for a 60 per cent stake in Fabex, with a commitment to buy the existing management's 40 per cent holding by the end of the decade.

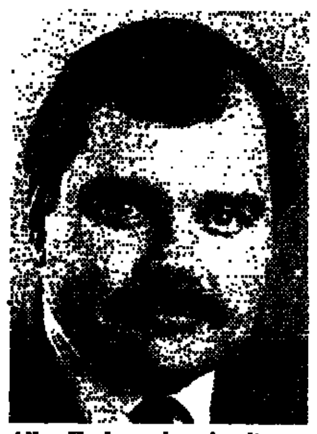
"This signals that we want to be a global player in all our core engineering sectors," said Mr Allen Yurko, Siebe's managing director and chief executive. Shares in the group rose 10p to 558p after he announced the deals, which will be funded from cash reserves.

Following the takeover, LeRoi will be integrated into Siebe's CompAir division, while Fabex will become the US bridgehead for Tecalemit, its international hose and fluid systems manufacturer.

The companies, both privately owned, last year reported annual pre-tax profits of £1.9m and £1.8m respectively.

Although they are not expected to be large contributors to group profits – expected to reach £275m (£217.2m) for the year to March 31 – Mr Yurko said they would enhance its access to Latin America and push its share of the US compressor market to 6 per cent.

"There will not be a big restructuring or redundancy programme," he added. "But we will want them to achieve the 10 per cent organic growth targets that we've set for the group."



Allen Yurko: enhancing its access to Latin America

Bus merger would have 13.5% of UK market

By Geoff Dyer

Badgerline and GRT, two of the UK's four quoted bus companies, plan to merge, creating the country's second largest bus operator.

Their decision to combine is the most significant recent move in the rapid consolidation of the UK bus industry.

The new company, to be called FirstBus, would have a market capitalisation of £265m ($424m), annual turnover of £348m and a fleet of 5,600 vehicles. It estimates that it would have a market share of 13.5 per cent, putting it closely behind Stagecoach.

Mr Moir Lockhead, GRT's chairman, who would become chief executive of FirstBus, said yesterday: "Given our strengths, we can become the strongest group in the sector."

The Office of Fair Trading said it would analyse the deal to see if it was anti-competitive. The companies said, however, the merger would not cause competition problems because there was no significant cross-over of business.

Aberdeen-based GRT is strong in central Scotland and in the east Midlands, while Badgerline's main operations are in the west of England and Yorkshire.

The merger plan was greeted angrily by the Labour Party which is calling for re-regulation of the bus industry. Mr Michael Meacher, opposition transport spokesman, said: "If you have five or six large companies and two of them merge, that is a serious move towards cartelisation."

Analysts said that the deal was a good fit, combining Badgerline, whose shares have performed sluggishly since flotation in November 1993, with the more dynamic GRT which came to market six months later. GRT's operating margins are 14.7 per cent, against Badgerline's 9.5 per cent.

GRT estimated that pre-tax profits in the year to March 31 would be £8m, up from £4.4m. Badgerline reported 1994 pre-tax profits of £16.7m, against a loss of £930,000.

After the merger, which is expected to become effective in June, Badgerline shareholders will own 63.6 per cent of FirstBus and GRT shareholders 36.4 per cent. Mr Trevor Smallwood, Badgerline's chairman, will take up the same position in FirstBus.

Shares in GRT rose 13p to 269p and Badgerline shares were 5p higher at 138p.

US growth boosts JBA

By Christopher Price

JBA Holdings, the software company which came to the market in June last year, increased pre-tax profits by 33 per cent from £4.61m to £6.13m ($9.80m) in 1994 as it benefited from increased sales and new product initiatives.

Turnover rose 22 per cent from £74.5m to £90.7m. There was a particularly strong return from the sale of product licences, with revenue jumping 45 per cent to £35.02m. Most of the increase came from the US, where turnover increased 35 per cent to £37.03m. Maintenance revenues rose by a similar amount to £11.43m.

However, turnover in the software support systems division slipped 11 per cent to £26.23m.

The downturn in the software support area was most marked in the UK, where turnover was virtually static at £35.22m. However, Mr Vickery said: "We believe the situation has stabilised now and that the business will begin to show a slow improvement this year."

The group was pursuing a number of overseas alliances and acquisitions, most notably currently conducting due diligence on Ratioplan, a German software company. During the year, it had also bought an Australian computer concern, HB&A.

Disposals included its Spanish subsidiary to management for a small sum and the present negotiations for the sale of its Mexican interests.

LEX COMMENT

Bus groups merger

The merger of Badgerline and GRT to form the UK's second largest bus company has the flavour of a reverse takeover. Although GRT is the smaller of the two, its strong record is the driving force behind the transaction. The appointment of Mr Moir Lockhead, its chairman, as chief executive of the new company suggests that operational control will fall to him. To date, businesses brought under GRT's management have achieved operating profit margins of about 15 per cent within two years. There is every chance that FirstBus will repeat this feat, pulling up Badgerline's margin from less than 10 per cent.

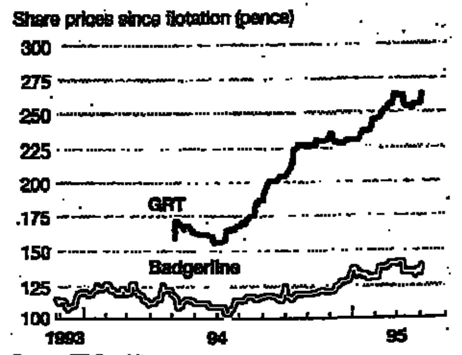
Both sets of shareholders stand to gain from more than the substantial economies of scale. Badgerline will benefit from more aggressive management, while GRT will have another £223m of turnover to work on. This means that there is plenty of room for earnings growth in the next few years, without immediately casting round for further acquisitions.

There is still room for further consolidation in the UK bus industry, which is currently undergoing a post-privatisation shake-up, but the potential for overlap in local markets is great. Stagecoach, the market leader with a 15 per cent share in the UK, has already ventured overseas.

Ultimately, FirstBus will have to follow. The alternative, expansion into new markets within the UK, has also been considered. But the new management's choice of name suggests that enthusiasm for rail passenger franchises may now have waned.

UK bus groups

Share prices since flotation (pence)



Source: FT Graphite

Huntingdon Intl sells in US

By Patrick Harverson

Huntingdon International Holdings, the lossmaking life sciences group, is selling its US engineering and environmental services business to Maxim Technologies of the US.

Maxim will pay Huntingdon $14m as well as issuing the UK company warrants to acquire 5 per cent of Maxim's equity.

Huntingdon has been trying to sell its US business since last year. After initially failing to find a buyer, the company had planned to reorganise the unit. But it said yesterday that it had concluded there was little prospect of reducing the unit's losses.

Huntingdon's shares firmed 3p yesterday to close at 49p.

COMPANY NEWS: UK

No betting on the photocopier race

James Whittington looks at the rival bids for the once-despondent Southern Business

When Southern Business Group presented its annual results in January, analysts sensed an uncharacteristic feeling of despondency.

A glum Mr David McErlaine, chief executive, described the previous year as the most traumatic the photocopying sector had ever seen.

Having been mauled by recession and a critical Office of Fair Trading report in March 1994, the photocopier and vending machines supplier unveiled a 41 per cent slump in pre-tax profits to £7.2m (£12.2m) and said there was little prospect of organic growth.

Three months on, things have perked up.

The group's shareholders, of which the management makes up 8 per cent, are being wooed by two, possibly three, companies in a takeover race which has raised eyebrows in the City.

At the end of February, after a week of rumours about possible buyers from across the Atlantic, Berkeley Business Group, a UK business services company, made a surprise offer which was recommended by Southern's board.

Although Mr Alan Baldwin, Berkeley's chairman, was not new to the City – he previously headed Securiguard before it was acquired by Rentokil in 1993 – analysts were unsure what to make of the offer and Berkeley's share price dropped 27 per cent on the day of the announcement.

The bid valued Southern at £72.2m on the basis of 520p in cash and 3.5 newly consolidated Berkeley shares for every 10 shares in the target, at the day's closing price.

Less than a month later, the original rumours proved correct when the acquisitive Danka Business Systems, which is listed in London but has 90 per cent of its sales in the US, joined the fray with a 70p cash offer valuing Southern at £67.6m.

Southern's management immediately switched its allegiance to Danka, showing they preferred a cash rather than paper exit and fuelling speculation that the Berkeley offer was merely designed to "flush the big boys out".

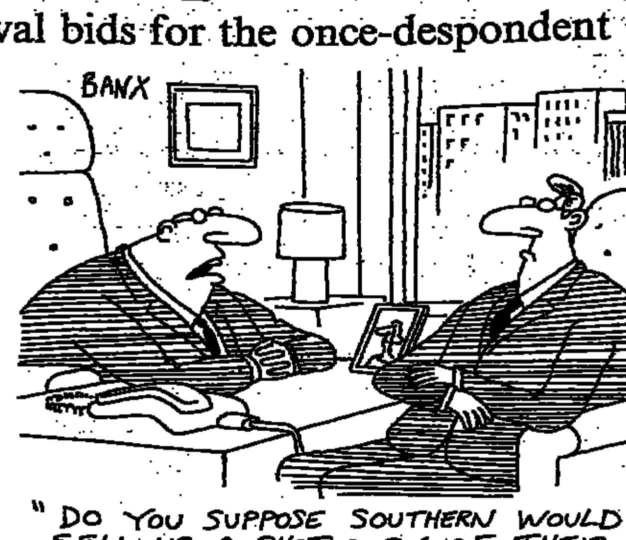
Last week such conjecture was reinforced when Alco Standard Corporation, Danka's rival in the US, said it was "interested" in making an offer for Southern.

Some in the City are bemused by all the fuss being made over Southern.

Once the doyen of the USM after years of record profits and a rocketing share price, the company has since become embroiled in controversy over its leasing contracts and accounting practices.

In response to the OFT report, it had no choice but to reduce its standard leases from nine to five years and untangle some of the small print in its contracts.

"The company had to reverse its operational philosophy over the last two years. It cleaned up its act and sacked some of its more unscrupulous sales staff, but as a result its profits crashed," said a competitor.



"DO YOU SUPPOSE SOUTHERN WOULD SELL US A PHOTOCOPY OF THEIR LEASE BOOK?"

The attraction to Southern's bidders, however, is not its image but its "lease book", which some analysts value at £70m.

Unlike other photocopying companies in the UK, Southern prefers to keep its 10,000 – mainly Canon – photocopying machines as assets, which are repaired and refurbished whenever necessary.

Berkeley has said it would sell the lease book to a third party if its bid were successful.

"We would move away from leasing towards selling the machines, which would release a lot of cash," said Mr Andrew Ducker, finance director. Although there would be a deferred tax charge of between £15m and £20m on any sale, this would help fund the company's offer, which requires about £50m of bank debt.

Danka, which leases three quarters of its 20,000 Toshiba and Minolta photocopying machines through a third party, says it has no intention of selling the lease book as a unit.

"We'd offer our customers the choice of either in-house or third party leasing," says Mr Martin St Quinton, chief executive of European operations.

Mr Ian Crabb, managing director at Erskine House, Alco's only acquisition in the UK, says a small percentage of its 30,000 Canon and Sharp photocopier contracts are leasing arrangements.

But he would not be drawn into speculation on what Alco would do with Southern's business.

Few analysts are prepared to bet on who might win what is likely to be a three-horse race.

With group turnover of about £500m for Danka and more than £5bn for Alco, both have the financial clout to raise the stakes.

Southern's turnover of £53.5m last year would add to Danka's annual sales of £40m and Alco's of £65m in the UK, making either one by far the largest independent supplier of photocopy machines.

For Berkeley, however, it is more of a make or break situation. The group's main activities are Captain Cargo, an overnight freight delivery service, and servicing about 11,000 – mainly Sharp – photocopiers. Group turnover is about £30m and it is estimated to have incurred a small loss last year. Mr Baldwin says "we would just look around for other acquisitions" if it should lose the bid.

Analysts believe Alco will improve on Danka's cash offer within the next two weeks. Depending on Alco's offer, they also expect Berkeley to increase its bid. Berkeley's share price suffered a further fall last week which, at 50p yesterday, reduced its cash-and-share offer to 69½p per share, just below Danka's bid.

Southern, meanwhile, is just sitting tight and smiling.

Sharp rise to £83m for Rover

By Kevin Done,
Motor Industry Correspondent

Rover Group, the UK subsidiary of BMW of Germany, more than doubled its profits before interest and tax last year from £38m to £83m ($133m) on a comparable basis.

The company said the previously announced operating profit of £56m for 1993 had been restated to reflect changes in accounting principles.

Rover increased its unit sales by 11 per cent last year to 475,500, the highest since 1989. Sales of Rover and Land Rover models outside the UK increased by 22 per cent to 219,300. Rover was still dependent for 54 per cent of its total sales volume on the UK market, where sales rose by only 3 per cent to 256,200.

Rover production rose by 16 per cent to 478,600 last year, excluding 8,726 Honda Concertos produced for the Japanese car maker.

Output for Honda is being phased out as the Japanese group raises output at its own UK assembly plant.

Elcat sale

The management of Melfin (UK), the Nottingham-based vehicle seating manufacturer, is staging a £17.5m ($28m) buy-out from Elcat, its Italian parent.

Equity funding has come from NatWest Ventures and senior debt and working capital from National Westminster Bank. Melfin, which employs a workforce of 800 and has annual sales of £50m, is changing its name to Tricom Automotive.

Pilkington pays PPG £50m to end dispute

By David Wighton

Pilkington, the glass manufacturer, is to pay US rival PPG Industries $50m as part of an agreement to end a 10-year legal dispute between the two companies.

Both have agreed to dismiss all actions on the basis of no finding of fault on either side.

The payment represents the reimbursement of the damages and costs it was awarded by the UK courts in 1992 together with interest and a payment towards balancing the legal costs incurred by both parties.

Mr Andrew Robb, Pilkington's finance director, said the agreement was reached after the companies realised that the dispute would drag on for at least another two years while the costs escalated.

"It became clear that the chances of either side coming out the winner were pretty low. Both sides just looked at each other and said 'this is ridiculous'."

The dispute has cost Pilkington more than £30m over the past decade, of which £8m was incurred in the past year.

Pilkington started the action when it alleged that PPG had used its glass technology in China without a licence. PPG responded by alleging that Pilkington had violated US anti-trust laws with respect to float glass production technology and sales.

Pilkington will include the £31m, before tax relief, as an exceptional charge in its accounts for the year to March 31 1995. The 1992 payment included some damages, but Pilkington never took them as profit.

Pittencrieff Resources at £1.05m

Pittencrieff Resources, the oil and gas company formed in June last year when Pittencrieff demerged its natural resources division from its US-based telecommunications business, reported pre-tax profits of £1.05m for the seven months to December 31.

The outcome was struck on turnover of £7.34m and after interest payable of £657,000. Earnings came out at 1.82p per share.

Since June some £7.7m had been spent on capital investment, the company said, of which £3.3m was funded by internally generated cash flow with the balance from cash resources and bank borrowings.

Net debt at the year end was £15.5m, representing gearing of 35.7 per cent.

PowerGen to invest in Indonesia

PowerGen, the electricity generation company, is expected to invest about £70m by the end of the century in a joint venture project to build a 1,200MW power plant in Indonesia. It takes to £200m the amount of money it has committed to investment overseas.

PowerGen is taking a 35 per cent stake in PT Jawa Power, which will build, own and operate a coal-fired power station at Paiton. Capital costs of $1.6bn will be project financed.

Other partners are Siemens of Germany, which will have a 50 per cent stake, and PT Bumipertiwi Tatapradipta, which will have 15 per cent.

Electricity will be supplied to PLN, the national electricity company, under a 30 year power purchase agreement.

RESULTS

		Turnover (£m)		Pre-tax profit (£m)		EPS (p)		Dividends: Current payment (p)	Date of payment	Corresponding dividend	Total for year	Total last year
Allied London Props	6 mths to Dec 31	12.1■	(10.5■)	5.89	(5.75)	4.7	(4.5)	1.8	July 3	1.8	-	3.88
Argent ★	Yr to Dec 31	11■	(12.7■)	2.7	(3.86L)	5.3	(9.7L)	-	-	-	-	-
Beradin	Yr to Dec 31	1.28	(0.931)	0.782	(0.485)	3.67	(2.01)	2.45♟	May 12	1.2	2.45♟	1.2
Boxmore §	Yr to Dec 31	46.9	(32.6)	7.05	(4.45♥)	19.9	(16)	3.105	May 25	2.75	4.48	4
Brooks Service	Yr to Dec 31	26	(23.9)	0.71	(0.32)	4.08	(3.13)	1.5	May 30	1	2.25	1.5
Clinical Computing	Yr to Dec 31	1.47	(2.64)	0.69L	(1.13)	4.3L	(9.07)	-	-	-	-	-
CLS	Yr to Dec 31	24.5	(15.9)	12.2	(2.32L)	15.7	(3.6L)	2.95	May 31	-	3.35	-
Dagenham Motors	Yr to Dec 31	227.6	(187.3)	4.09	(2.35)	11.4	(8.7)	5†	May 26	4.5	7	6.25
Home Counties News	Yr to Dec 31	26.6	(24)	1.88♥	(0.459)	10.74	(4.59)	3	May 22	2.5	5.5	4.5
IAWS ♣	6 mths to Jan 31	226.5	(218.2)	3.47	(2.03)	2.06	(1.47)	1.265	June 22	1.15	-	2.415
JBA	Yr to Dec 31	90.7	(74.5)	6.13	(4.61)	12.13	(10.19)	2.5	June 9	-	-	-
Malaya §	Yr to Dec 31	170.5	(49.7)	0.617	(0.378L)	0.6	(0.5L)	0.15	May 19	nil	0.4	nil
Owen & Robinson	Yr to Jan 31	23.5	(21.6)	8.13L♠	(0.111)	32.93L	(0.48)	-	-	-	-	-
Pittencrieff Res	7 mths to Dec 31	7.34	(-)	1.045	(-)	1.82	(-)	-	-	-	-	-
Rea Brothers	Yr to Dec 31	-	(-)	1.16	(2.05)	2.01	(4.05)	0.5	May 22	0.45	1	0.75
Stylo	Yr to Jan 28	164.6	(132.1)	6.52	(2.55)	17.24	(12.1*)	7	Oct 2	2.66*	7	2.66*
Sunset + Vine ♦	6 mths to Dec 31	3.8	(2.34)	0.278	(0.256)	3.3	(3)	1.5	May 26	1.5	-	4
Trafficmaster	Yr to Dec 31	1.03	(0.823)	1.314L	(0.845L)	6.5L	(6.2L)	-	-	-	-	-
United Friendly ♦	Yr to Dec 31	-	(-)	47.6	(26)	39.3	(21.2)	13.9	May 30	11	20	16.5
Vymura	Yr to Dec 31	39.4	(38.3)	3.78	(3.28)	10.7	(10.34)	3.1	June 21	-	3.1	-

Investment Trusts		NAV (p)		Attributable Earnings (£m)		EPS (p)		Current payment (p)	Date of payment	Corresponding dividend	Total for year	Total last year
F&C US Smaller	6 mths to Dec 31	103.5	(109.2)	0.012L	(0.223‡)	0.02L	(0.45)	-	-	-	-	-

Dividends shown net. Figures in brackets are for corresponding period. ♠After exceptional charge. ♥After exceptional credit. *Adjusted for scrip issue. ♟Foreign income dividend. †On increased capital. §USM stock. ‡Comparisons for 50-week period from incorporation. ♦Comparatives restated. ♣Irish currency. ■Rental income. ★Comparisions pro forma.

مكرر من الاصل

COMMODITIES AND AGRICULTURE

MARKET REPORT

Platinum hits fresh high before rally boils over

The PLATINUM price rally boiled over yesterday after an early surge pushed it to a fresh 4½-year high of US$452.50 a troy ounce at London's morning "fixing". In the afternoon it was back to $445.75, still $3.65 up on the day.

Dealers said professional buying on behalf of a client had prompted the initial rise, but once those orders were filled buying had dried up.

At the New York Mercantile Exchange's, where platinum futures also retreated from morning highs, traders said there had been talk of a purchase overnight of 50,000 to 100,000 ounces by a large US commercial concern, although it was unclear if it was acting on its own account. One trader noted rumours that the move was linked to a "fund play" on the gold-platinum spread, which extended to about $60 before platinum hit resistance levels. He added that the position appeared to have been at least partially unwound.

At the London Metal Exchange base metals contracts built on morning gains during afternoon trading as markets prepared for today's key April option declarations.

Traders said the declarations needed to be out of the way for COPPER to find new direction, unhampered by the option stranglehold, which had kept prices in a $2,900 to $2,950 a tonne range for the three months delivery position, which ended after hours trading $8 down at $2,919.

ALUMINIUM ran into chart-based resistance between $1,920 and 1,930 a tonne in the morning and was prevented from revisiting that area by profit-taking in the afternoon. Final business was at $1,910, still up $24 from Monday.

Compiled from Reuters

LME WAREHOUSE STOCKS
(As at Monday's close)
tonnes

Aluminium	-11,450	to 1,188,300
Aluminium alloy	-160	to 25,820
Copper	-3,925	to 235,975
Lead	-1,525	to 281,525
Nickel	-438	to 121,998
Zinc	-6,850	to 1,012,250
Tin	-290	to 22,205

CIS common agricultural market proposed

By James Harding in Kiev

The countries of the former Soviet Union have agreed to draw up a framework for a free trade area for agricultural produce.

The Common Agricultural Market, as it will be called if the Russian draft legislation requested by CIS agriculture ministers is agreed, will remove tariffs on farm goods between former Soviet countries and establish a common customs boundary.

Mr Ivan Ushachev, Russian agriculture minister, said the plan was an attempt to halt the agricultural decline in the region by stimulating internal demand and protecting farmers from subsidised imports.

"Unless we can put in place a system of close co-operation with former Soviet countries, it will be very difficult for our agricultural sector to continue to exist," Mr Ushachev said.

However, US government officials attending a conference of CIS and central European agriculture ministers and western agribusiness leaders in Kiev this week where Mr Ushachev announced the decision to draft legislation for a proposal long under discussion, were sceptical.

"Multilateral agreements in the CIS have been characterised by slow progress – and that is where they have got off the ground at all," commented one US Department of Agriculture official who worked on the common market proposal in its infancy two years ago.

Russian officials expect to present the plan, which includes the establishment of central funds for exchange rate stabilisation and intervention rate compensation, for consideration in June.

By the end of the year, Mr Ushachev hopes to have a decision on the proposal, which would allow for a later rise in tariffs on subsidised agricultural produce from outside the CIS that threatened internal producers.

A forthcoming report from the Organisation for Economic Co-operation and Development shows that already by 1992, grain flows in the former Soviet republics were only 60 per cent of what they were in 1990; trade in vegetables had fallen to 50 per cent of what it was, meat to 36 per cent and milk and dairy goods to 23 per cent, explaining Russia's enthusiasm for an internal market.

In Russia alone, the decline in demand has driven a 32 per cent decline in meat production between 1990 and 1994.

Similarly in arable farming, the loss of Soviet markets and contraction in domestic demand, resulting in lower and less reliable payments for farmers, has pushed down Russian cereal production to 81.2m tonnes in 1994 from 116.7m tonnes in 1990.

Other former Soviet states, such as Armenia, Georgia, Kazakhstan, Belarus, Ukraine and Moldova, which have also seen significant falls in agricultural output, are understood to be in favour in principle.

Some Baltic states, however, have reservations about the sovereignty implications and even Russian officials acknowledge that the next stage is likely to prove the most difficult.

Western agribusiness leaders, generally critical of the conditions for trade and investment in agriculture in the former communist countries, refused to be drawn on the politics of the proposal, but endorsed freer trade between CIS countries.

Mr Jürgen Berner, regional director for central and eastern Europe for Unilever, told the assembly of agriculture ministers, "The crucial requirement for securing investment is that you open up your borders with your neighbours. Everybody says they want to export their farm products, but you have to open your doors to imports to let that happen".

Future of Pasminco's Dutch zinc smelter remains in doubt

By Nikki Tait in Sydney

The future of the Budelco smelter in the Netherlands, which produces about 5 per cent of the western world's zinc, remained in doubt yesterday, after a statement from Pasminco, the Australian zinc producer, explained that efforts to ensure that the facility could meet future environmental restrictions had been inconclusive to date.

Pasminco, which holds a 50 per cent interest in the 215,000 tonnes a year smelter said that discussions with CRA, another Australian mining company, over the supply of "clean" zinc concentrates from CRA's proposed new Century mine had been under way for some months. However, it added that no agreement had yet been reached on "satisfactory terms".

Budelco needs to assure the Dutch authorities that it will be able to receive low-iron zinc concentrates from Australia from mid-1998 onwards, or will be forced to close the smelter to stop the discharge of jarosite, a calcium-containing hazardous waste that is viewed as a pollution threat.

In Melbourne, Mr Peter Barnett, Pasminco's chief executive, said that talks with CRA – whose Century mine is said to be the only potential source of the required quantity of "clean" concentrates – were still continuing. He remained hopeful that the two companies would eventually reach agreement.

Mr Barnett declined to be drawn on timing, but Pasminco's formal statement noted that "if agreement on the terms for the supply of concentrate cannot be achieved, closure of Budelco in mid-1995 appears inevitable". Mr Barnett acknowledged that this meant that a deal with CRA would have to be struck by mid-year, or the Dutch authorities would have to extend the time-frame.

Pasminco added that an agreement to acquire's Royal Dutch/Shell's 50 per cent interest in the smelter, which produces around 5 per cent of western world zinc supply, was close to being finalised.

"Under the proposed agreement, Logam (through which the interest is held) would contribute its share of the environmental expenditure required at Budelco. In addition, it would contribute about 50 per cent of the total costs of closure of Budelco, if the viability of Budelco, based on the concept of Century-Budelco linkage, cannot be confirmed over coming months," it said.

Pasminco added said that negotiations over long-term power supply arrangements for the smelter were "at an advanced stage" and could be completed by the end of April.

Pasminco's shares rose 2 cents to A$1.42 after the statement was released, while CRA was also slightly firmer.

India's spice exporters seek richer mixture

Kunal Bose on productivity and quality problems that are depressing earnings

India has more land devoted to spice cultivation – over 2m hectares – than any other country. But its inability to generate sufficient surpluses is clouding the prospect of the country achieving its aim of trebling export earnings to $550m by 2001.

As with many other Indian crops, productivity of most spices is too low; and to compound the problem, Indians themselves consume more than 2m tonnes a year, the highest of any country.

The agriculture ministry accepts that, as the scope for bringing more land under spices is limited, the only way India can step up supply is by raising the productivity. According to Mr T. Nandakumar, chairman of the Spices Board, "the scope for bringing about improvement in the productivity of spices in India is immense. Our black pepper productivity does not stand in comparison with either Malaysia or Indonesia. Similarly, we are way behind Guatemala in cardamom productivity".

The principal reason is the presence of a large number of senile plants. In the case of cardamom, much of it is grown as an inter-crop or in homestead gardens, which also contributes to low productivity.

"The cardamom plants start becoming senile by the time they are 12 years old. Senility starts catching up with the pepper plants from the 15th year. The challenge before the board is to sustain the nationwide campaign to replace the senile plants with high-yielding varieties and also educate the growers about the need for improving the quality of spices," says Mr Nandakumar.

The board has already introduced three high-yielding varieties of cardamom and four more are to be released soon. "It is important that we have several varieties of highly productive cardamom plants available with us," he explains. "These are sensitive plants which grow well under specific climatic and topographic conditions. We have planned for the distribution of 500,000 plants to be produced through the tissue culture route during 1995-96."

Under the ideal growing condition, the high-yielding plants give a crop of up to 600kg of cardamom a hectare, compared with the present average Indian yield of 108kg a hectare. The board is aiming at a productivity of 200kg a hectare by the turn of the century. "We have done cardamom replantation in 24,000 hectares in the last eight years. We want to do replantation at an average annual rate of 2,500 hectares," says Mr Nandakumar. "The success of the cardamom productivity campaign also demands the provision of sustenance irrigation during the peak summer months."

Traders say the board and the agriculture ministry are giving so much importance to cardamom because it is the only high value spice of the 52 types produced in India. Because of low productivity, Indian cardamom is undercut in the world market, but the traders believe the Spices Board campaign should allow them to compete effectively by the turn of the century.

Black pepper, the India spice industry's biggest foreign exchange earner – it contributed Rs1.8bn ($57.1m) to the Rs5.4bn total in 1993-94 – is also claiming a lot of attention at the National Research Centre for Spices and the Indian Council of Agricultural Research. The NRCS, which is the world's largest repository of spice germplasm, has several projects in hand to developing high-yielding pepper plants and its scientists believe it should be possible to raise the black pepper productivity at least six-fold.

India has a 39 per cent share of world trade in spices by volume, but only 11.5 per cent by value. In an effort to correct this the Spices Board, says Mr Nandakumar, has decided to promote the cultivation of high value items like saffron – the present production is less than ten tonnes – vanilla, cloves and cinnamon.

In addition two varieties of paprika, are being grown on an experimental basis in Andhra Pradesh and Karnataka, and initial results are quite encouraging, according to Spice Board officials.

They point out, however, that with the importing countries setting increasingly stringent food safety and quality standards it has become imperative for the Indian spice exporters to give a lot more attention to drying, processing, storing and packing. The United Nations Development Programme has funded a project designed to raise the quality of Indian spices to the international level. The "Spice House Certificate" given by the Spices Board to the exporters is an assurance of quality.

As it will be some time before India will have sufficient export surpluses the board is encouraging traders to pay more attention to value-added exports. And board officials say this prospect has been given a boost by Mccormicks, the world's largest spice company, and Burns Philp of Australia deciding to set up shop in India.

At present, however, the export of value-added spices including spice oils and oleoresins, curry powder and paste, and spice powders is stagnant at around Rs1.5bn.

COMMODITIES PRICES

BASE METALS

LONDON METAL EXCHANGE
(Prices from Amalgamated Metal Trading)

■ ALUMINIUM, 99.7 PURITY ($ per tonne)

	Cash	3 mths
Close	1905-6	1912-13
Previous	1869-4	1872-3
High/low	1898/1896	1925/1894
AM Official	1895-96	1900-2
Kerb close		1909-10
Open int.	214,772	
Total daily turnover	67,769	

■ ALUMINIUM ALLOY ($ per tonne)

	Cash	3 mths
Close	1840-45	1840-41
Previous	1825-35	1820-30
High/low		1847
AM Official	1830-5	1835-40
Kerb close		1840-5
Open int.	2,614	
Total daily turnover	441	

■ LEAD ($ per tonne)

	Cash	3 mths
Close	602-3	616-7
Previous	594.5-5.5	608-8.5
High/low	606/602.5	620/615
AM Official	606-7	618-9
Kerb close		619-20
Open int.	36,238	
Total daily turnover	5,179	

■ NICKEL ($ per tonne)

	Cash	3 mths
Close	7650-60	7790-800
Previous	7580-90	7715-20
High/low	7618/7612	7900/7740
AM Official	7618-20	7755-60
Kerb close		7800-810
Open int.	53,061	
Total daily turnover	11,857	

■ TIN ($ per tonne)

	Cash	3 mths
Close	5840-50	5880-90
Previous	5795-805	5830-40
High/low	5880	5910/5880
AM Official	5875-80	5905-10
Kerb close		5880-90
Open int.	19,726	
Total daily turnover	4,653	

■ ZINC, special high grade ($ per tonne)

	Cash	3 mths
Close	1084-5	1086-7
Previous	1037-39	1060-2
High/low		1090/1070
AM Official	1064.5-65.5	1084-85
Kerb close		1085-6
Open int.	95,340	
Total daily turnover	20,833	

■ COPPER, grade A ($ per tonne)

	Cash	3 mths
Close	2960-61	2917-8
Previous	2988-9	2928-7
High/low	2975/2973	2937/2914
AM Official	2973-74	2921-22
Kerb close		2919-20
Open int.	234,705	
Total daily turnover	58,562	

■ LME AM Official £/$ rate: 1.6123
LME Closing £/$ rate: 1.6010

Spot:1.6025 3 mths:1.6014 6 mths:1.5982 9 mths:1.5951

■ HIGH GRADE COPPER (COMEX)

	Close	Day's change	High	Low	Open int	Vol
Apr	139.50	-1.00	139.80	139.00	1,754	262
May	137.25	-1.15	138.10	136.90	29,202	6,222
Jun	134.65	-0.95	134.90	134.70	922	8
Jul	132.65	-0.85	133.25	132.30	7,408	507
Aug	130.65	-0.80	131.10	131.10	369	1
Sep	128.65	-0.75	129.20	128.50	3,616	128
Total					48,858	8,257

PRECIOUS METALS

■ LONDON BULLION MARKET
(Prices supplied by N M Rothschild)

Gold(Troy oz)	$ price	£ equiv	SFr equiv
Close	391.70-392.10		
Opening	393.40-393.80		
Morning fix	391.95	242.994	442.159
Afternoon fix	391.70	243.898	445.859
Day's High	393.50-393.80		
Day's Low	390.20-390.60		
Previous close	391.70-392.10		

Loco Ldn Mean Gold Lending Rates (Vs US$)

1 month	4.72	6 months	5.10
2 months	4.80	12 months	5.32
3 months	4.89		

Silver Fix	p/troy oz.	US cts equiv.
Spot	323.00	521.00
3 months	327.45	527.70
6 months	332.85	535.55
1 year	345.55	553.56

Gold Coins	$ price	£ equiv.
Krugerrand	397-400	247-250
Maple Leaf	403.85-406.05	
New Sovereign	92-95	57-60

Precious Metals continued

■ GOLD COMEX (100 Troy oz.; $/troy oz.)

	Sett price	Day's change	High	Low	Open int	Vol.
Apr	393.0	+0.3	393.6	391.0	2,409	642
May	394.0	+0.2	-	-	100	-
Jun	395.1	+0.2	396.0	393.1	96,130	32,398
Aug	398.5	+0.2	398.8	396.5	19,649	638
Oct	402.0	+0.2	402.8	401.9	5,814	66
Dec	405.7	-	406.1	403.5	14,562	560
Total					184,426	35,282

■ PLATINUM NYMEX (50 Troy oz.; $/troy oz.)

	Sett price	Day's change	High	Low	Open int	Vol.
Apr	448.7	+8.6	446.5	442.0	563	112
Jul	453.5	+7.4	454.0	446.0	18,413	4,047
Oct	457.0	+7.4	454.5	450.5	2,477	77
Jan	460.1	+7.4	-	-	727	3
Total				-	22,212	4,293

■ PALLADIUM NYMEX (100 Troy oz.; $/troy oz.)

	Sett price	Day's change	High	Low	Open int	Vol.
Jun	177.50	+2.20	177.75	175.00	20	-
Sep	179.25	+2.20	178.25	177.50	6,606	480
Dec	180.50	+2.20	-	-	886	9
Mar	168.50	-	-	-	160	-
Total					7,672	489

■ SILVER COMEX (100 Troy oz.; Cents/troy oz.)

	Sett price	Day's change	High	Low	Open int	Vol.
Apr	528.2	-0.2	528.2	521.0	-	-
May	529.7	-0.3	537.0	522.0	54,082	19,078
Jul	535.4	-0.1	542.5	525.0	21,178	3,571
Sep	540.9	-0.1	547.0	534.0	11,832	305
Dec	549.7	-0.1	554.5	541.5	16,998	172
Jan	552.8	-0.1	-	-	15	-
Total					128,581	23,549

ENERGY

■ CRUDE OIL NYMEX (42,000 US galls. $/barrel)

	Latest price	Day's change	High	Low	Open int	Vol
May	19.18	+0.12	19.21	19.01	86,339	33,899
Jun	18.97	+0.09	19.01	18.84	66,193	11,732
Jul	18.78	+0.11	18.78	18.64	39,493	8,298
Aug	18.56	+0.10	18.56	18.49	18,601	2,163
Sep	18.40	+0.07	18.40	18.33	22,750	1,631
Oct	18.24	-0.06	18.26	18.20	11,446	682
Total					N/A	N/A

■ CRUDE OIL IPE ($/barrel)

	Latest price	Day's change	High	Low	Open int	Vol
May	17.52	+0.13	17.57	17.40	50,376	19,760
Jun	17.25	+0.10	17.28	17.14	40,288	14,560
Jul	17.02	+0.07	17.02	16.95	15,363	2,308
Aug	16.86	+0.08	16.88	16.82	12,049	1,176
Sep	16.75	+0.02	16.78	16.74	6,175	180
Oct	16.69	+0.01	16.70	16.69	3,901	544
Total					148,779	37,526

■ HEATING OIL NYMEX (42,000 US galls.; c/US galls.)

	Latest price	Day's change	High	Low	Open int	Vol
May	47.80	+0.33	47.95	47.40	34,113	9,093
Jun	48.10	+0.28	48.25	47.84	18,273	2,424
Jul	48.60	+0.33	48.60	48.29	18,351	2,652
Aug	49.05	+0.18	49.05	48.95	7,815	364
Sep	49.95	+0.23	49.95	49.90	4,817	125
Oct	51.00	-	-	-	3,842	87
Total					N/A	N/A

■ GAS OIL IPE ($/tonne)

	Sett price	Day's change	High	Low	Open int	Vol
Apr	153.75	+1.25	154.00	152.75	24,369	5,510
May	151.75	+0.75	152.00	151.25	25,738	4,306
Jun	151.00	+0.75	151.25	150.25	17,847	1,861
Jul	151.75	+0.75	152.00	151.25	8,831	836
Aug	153.25	+0.25	153.50	152.75	3,002	345
Sep	154.75	+0.50	155.00	154.50	3,067	990
Total					98,334	14,121

■ NATURAL GAS NYMEX (10,000 mmBtu.; $/mmBtu.)

	Latest price	Day's change	High	Low	Open int	Vol
May	1.700	+.019	1.705	1.672	30,657	10,627
Jun	1.755	+.015	1.755	1.735	15,113	2,103
Jul	1.795	+.006	1.795	1.770	15,311	2,104
Aug	1.790	+.001	1.800	1.780	13,090	846
Sep	1.795	0.004	1.806	1.790	13,094	886
Oct	1.820	0.001	1.825	1.810	9,463	813
Total					N/A	N/A

■ UNLEADED GASOLINE
NYMEX (42,000 US galls.; c/US galls.)

	Latest price	Day's change	High	Low	Open int	Vol
May	5800	+61	5810	5706	27,480	5,744
Jun	5750	+39	5755	5690	12,702	5,711
Jul	5710	+34	5715	5680	9,118	2,317
Aug	5645	-	-	-	5,369	385
Sep	5550	+34	5650	5550	2,454	118
Oct	5436	-	-	-	1,868	28
Total					N/A	N/A

GRAINS AND OIL SEEDS

■ WHEAT LCE (£ per tonne)

	Sett price	Day's change	High	Low	Open int	Vol
May	115.95	-0.05	116.50	115.95	1,913	181
Jul	116.95	-	117.50	116.95	514	95
Sep	102.00	-0.35	102.30	102.00	332	10
Nov	102.90	-0.60	103.50	102.90	2,549	106
Jan	104.90	-0.60	105.00	104.90	830	15
Mar	106.15	-0.60	-	-	402	-
Total					6,580	412

■ WHEAT CBT (5,000bu min; cents/60lb bushel)

	Sett price	Day's change	High	Low	Open int	Vol
May	348/4	+2/6	349/0	343/4	18,584	3,214
Jul	342/4	+2/0	343/6	339/0	25,189	4,461
Sep	348/2	+2/0	349/6	345/6	4,492	1,005
Dec	360/2	+1/6	361/2	357/2	2,992	293
Mar	364/6	+1/6	364/6	362/0	173	9
Jul	339/0	+0/4	339/0	339/0	25	1
Total					51,445	8,983

■ MAIZE CBT (5,000 bu min; cents/56lb bushel)

	Sett price	Day's change	High	Low	Open int	Vol
May	252/0	-1/2	252/6	251/4	103,361	23,888
Jul	259/4	-0/6	259/0	257/6	118,148	16,711
Sep	262/0	-0/2	262/0	261/0	21,298	998
Dec	265/2	+0/4	265/4	263/6	96,602	15,870
Mar	271/4	+0/4	271/4	269/6	10,052	815
May	276/0	+0/4	276/2	274/0	602	125
Total					361,331	60,439

■ BARLEY LCE (£ per tonne)

	Sett price	Day's change	High	Low	Open int	Vol
May	109.15	-1.35	109.25	109.15	153	4
Sep	101.25	+0.25	101.75	101.25	135	13
Nov	101.95	-0.30	102.60	101.95	533	10
Jan	104.00	-0.40	-	-	174	-
Total					1,101	27

■ SOYABEANS CBT (5,000bu min; cents/60lb bushel)

	Sett price	Day's change	High	Low	Open int	Vol
May	581/6	-0/4	584/0	580/0	37,746	10,975
Jul	592/2	-1/0	594/6	590/4	50,178	21,773
Aug	596/2	-0/6	598/6	595/0	7,403	604
Sep	599/2	-0/6	601/4	598/0	4,122	243
Nov	606/2	-0/4	608/0	605/0	30,631	5,992
Jan	613/2	-1/6	615/6	613/0	2,097	109
Total					135,414	38,877

■ SOYABEAN OIL CBT (60,000lbs; cents/lb)

	Sett price	Day's change	High	Low	Open int	Vol
May	25.51	-0.03	25.78	25.48	26,638	9,184
Jul	25.16	-0.06	25.43	25.15	22,663	4,538
Aug	25.09	-0.04	25.37	25.08	8,257	577
Sep	25.00	-0.05	25.26	25.00	6,981	449
Oct	24.88	-0.09	25.15	24.85	6,769	626
Dec	24.76	-0.06	25.05	24.75	13,825	1,244
Total					85,879	16,718

■ SOYABEAN MEAL CBT (100 tons; $/ton)

	Sett price	Day's change	High	Low	Open int	Vol
May	172.4	-0.1	172.8	170.7	32,917	11,172
Jul	176.9	-	177.5	175.4	33,387	13,699
Aug	178.8	-	179.2	177.5	7,978	1,247
Sep	180.7	+0.2	180.7	179.3	5,743	653
Oct	181.8	+0.3	182.0	180.6	8,981	425
Dec	184.0	+0.2	184.2	182.5	11,823	3,088
Total					181,819	30,387

■ POTATOES LCE (£/tonne)

	Sett price	Day's change	High	Low	Open int	Vol
Apr	302.5	+7.0	330.0	280.5	282	266
May	341.0	+5.5	342.0	330.0	176	43
Jun	250.0	-	-	-	-	-
Nov	105.0	-	-	-	-	-
Mar	250.0	-	-	-	-	-
Total					591	309

■ FREIGHT (BIFFEX) LCE ($10/index point)

	Sett price	Day's change	High	Low	Open int	Vol
Apr	2190	+62	2190	2150	884	48
May	2145	+78	2145	2075	1,022	73
Jun	2038	+96	2060	1990	-	29
Jul	1943	+63	1960	1890	1,055	135
Oct	1920	+70	1920	1870	992	13
Jan	1850	+45	-	-	325	-
Total					4,278	298

	Close	Prev
BFI	2226	2197

Minor Metals
European free market, from Metal Bulletin, $ per lb in warehouse, unless otherwise stated (last week's in brackets, where changed). Antimony: 99.6%, $ per tonne, 4,150-4,350 (4,380-4,650). Bismuth: min. 99.99%, tonne lots 3.25-3.50 (3.35-3.60). Cadmium: min. 99.5%, 110-120 (120-130) cents a pound. Cobalt: MB free market, 99.8%, 27.50-28.00 (27.50-28.30); 99.3%, 24.00-25.00 (24.80-25.30). Mercury: min. 99.99%, $ per 76 lb flask, 135-150. Molybdenum: drummed molybdic oxide, 11.00-12.00 (11.50-12.50). Selenium: min 99.5%, 3.20-4.10 (3.40-4.20). Tungsten ore: standard min. 65%, $ per tonne unit (10kg) WO_3, cif, 58-70. Vanadium: min. 98%, cif, 4.10-4.35 (4.38-4.62). Uranium: Nuexco exchange value, 7.25.

SOFTS

■ COCOA LCE (£/tonne)

	Sett price	Day's change	High	Low	Open int	Vol
May	933	+1	934	923	19,440	1,833
Jul	953	+2	956	942	17,895	2,413
Sep	972	+5	975	959	15,579	1,535
Dec	991	+6	995	979	19,937	2,093
Mar	1011	+5	1012	998	24,937	1,077
May	1021	+5	1022	1011	5,603	687
Total					113,731	9,713

■ COCOA CSCE (10 tonnes; $/tonnes)

	Sett price	Day's change	High	Low	Open int	Vol
May	1333	+27	1333	1287	31,226	3,894
Jul	1351	+22	1357	1310	15,555	1,385
Sep	1370	+15	1370	1337	9,515	377
Dec	1394	+12	1394	1368	6,227	144
Mar	1414	+3	1414	1398	5,974	1
May	1428	+2	1428	1425	4,677	25
Total					80,416	5,826

■ COCOA (ICCO) (SDR's/tonne)

Apr 3	Price	Prev. day
Daily	917.80	929.81

■ COFFEE LCE ($/tonne)

	Sett price	Day's change	High	Low	Open int	Vol
May	3066	-18	3082	3060	13,801	1,092
Jul	3016	-9	3025	3011	10,703	1,068
Sep	2974	-12	2983	2972	8,460	65
Nov	2949	-4	2966	2950	1,582	10
Jan	2937	-5	2950	2950	289	-
Mar	2910	-13	-	-	6	-
Total					34,841	2,269

■ COFFEE 'C' CSCE (37,500lbs; cents/lbs)

	Sett price	Day's change	High	Low	Open int	Vol
May	165.10	-0.35	166.20	164.25	12,633	3,314
Jul	166.65	-0.30	167.50	166.00	9,994	1,477
Sep	167.80	-	168.50	167.25	5,989	374
Dec	168.00	-	168.50	166.00	5,804	194
Mar	167.75	-	-	-	1,825	25
May	167.75	-	-	-	51	-
Total					36,096	5,384

■ COFFEE (ICO) (US cents/pound)

Apr 3	Price	Prev. day
Comp. daily	156.92	158.45
15 day average	159.07	159.87

■ No7 PREMIUM RAW SUGAR LCE (cents/lbs)

	Sett price	Day's change	High	Low	Open int	Vol
May	15.27	-0.01	15.27	15.27	1,081	24
Jul	15.15	-	-	-	2,380	-
Oct	12.58	-	-	-	-	-
Jan	13.25	-	-	-	-	-
Mar	12.03	-	-	-	2,000	-
Total					5,421	24

■ WHITE SUGAR LCE ($/tonne)

	Sett price	Day's change	High	Low	Open int	Vol
May	371.7	-1.6	374.5	371.5	9,890	1,211
Aug	359.7	-2.0	362.5	359.5	8,496	973
Oct	330.2	-1.3	331.8	330.0	3,599	58
Dec	321.0	-1.5	323.4	321.0	1,146	230
Mar	317.8	+0.1	318.9	316.6	749	30
May	317.8	+0.8	-	-	238	-
Total					24,118	2,502

■ SUGAR '11' CSCE (112,000lbs; cents/lbs)

	Sett price	Day's change	High	Low	Open int	Vol
May	14.27	-0.12	14.45	14.23	48,690	14,279
Jul	12.99	-0.12	13.16	12.95	40,159	3,858
Oct	12.19	-0.04	12.29	12.15	34,582	4,783
Mar	11.78	-0.01	11.84	11.77	14,751	1,143
May	11.84	+0.01	11.71	11.69	3,901	128
Jul	11.39	-	11.45	11.45	4,373	55
Total					147,271	24,305

■ COTTON NYCE (50,000lbs; cents/lbs)

	Sett price	Day's change	High	Low	Open int	Vol
May	98.22	+2.00	98.22	94.22	16,045	3,233
Jul	93.10	+2.00	93.10	89.10	18,223	3,644
Oct	83.28	+2.00	83.28	79.40	6,636	653
Dec	77.89	+1.41	77.97	75.50	24,706	2,600
Mar	79.20	+1.40	79.20	76.85	6,759	379
May	78.80	+0.30	78.80	77.70	2,002	47
Total					74,373	10,756

■ ORANGE JUICE NYCE (15,000lbs; cents/lbs)

	Sett price	Day's change	High	Low	Open int	Vol
May	106.80	+1.15	107.35	105.95	11,545	1,142
Jul	110.95	+1.35	111.25	110.00	6,121	350
Sep	114.70	+1.15	114.90	114.00	5,027	120
Nov	112.75	+1.20	112.75	112.75	2,373	37
Jan	113.95	+0.45	114.10	113.60	1,801	143
Mar	115.85	+0.85	116.00	116.00	372	55
Total					27,327	1,867

VOLUME DATA
Open interest and Volume data shown for contracts traded on COMEX, NYMEX, CBT, NYCE, CME, CSCE and IPE Crude Oil are one day in arrears.

INDICES

■ REUTERS (Base: 18/9/31=100)

Apr 4	Apr 3	month ago	year ago
2308.9	2303.7	2325.8	1811.7

■ CRB Futures (Base: 1967=100)

Apr 3	Mar 31	month ago	year ago
234.53	232.94	221.67	226.02

MEAT AND LIVESTOCK

■ LIVE CATTLE CME (40,000lbs; cents/lbs)

	Sett price	Day's change	High	Low	Open int	Vol
Apr	68.725	+0.175	68.750	68.050	25,258	7,935
Jun	63.225	+0.575	63.250	62.425	26,814	7,008
Aug	61.300	+0.400	61.350	60.625	10,702	1,940
Oct	62.475	+0.300	62.500	62.000	6,633	1,013
Dec	64.225	+0.125	64.250	63.900	3,299	324
Feb	65.150	+0.100	65.150	64.800	2,394	131
Total					75,941	18,497

■ LIVE HOGS CME (40,000lbs; cents/lbs)

	Sett price	Day's change	High	Low	Open int	Vol
Apr	38.700	+0.150	38.750	38.175	4,136	1,662
Jun	44.225	-0.125	44.350	43.900	12,604	5,092
Aug	43.650	-0.175	43.850	43.400	2,989	676
Oct	40.775	-	40.950	40.600	3,443	560
Dec	41.350	-0.175	41.800	41.350	1,083	199
Feb	41.850	-0.075	42.100	41.800	364	30
Total					28,651	8,650

■ PORK BELLIES CME (40,000lbs; cents/lbs)

	Sett price	Day's change	High	Low	Open int	Vol
May	39.850	-0.125	40.350	38.550	3,782	1,729
Jul	40.250	-0.075	40.650	40.050	2,387	1,007
Aug	38.825	-	39.950	38.825	756	170
Feb	51.400	+0.900	52.000	50.950	161	18
Mar	48.575	-	50.575	48.575	18	9
Total					7,084	2,924

LONDON TRADED OPTIONS

Strike price $ tonne — Calls — — Puts —

■ ALUMINIUM (99.7%) LME	Jul	Oct	Jul	Oct
1850	131	159	98	144
1900	108	137	123	170
1950	87	117	152	200
■ COPPER (Grade A) LME	Jul	Oct	Jul	Oct
2850	119	85	63	137
2900	92	67	86	168
2950	70	52	112	201
■ COFFEE LCE	May	Jul	May	Jul
2950	153	235	24	169
3000	121	210	35	224
3050	92	190	55	256
■ COCOA LCE	May	Jul	May	Jul
925	23	58	-	30
950	12	45	1	42
975	5	34	2	56
■ BRENT CRUDE IPE	Jun	Oct	Jun	Oct
1650	86	81	26	62
1700	52	64	50	86
1750	37	45	86	121

LONDON SPOT MARKETS

■ CRUDE OIL FOB (per barrel/May) +or-

Dubai	$16.60-6.70q	+0.190
Brent Blend (dated)	$18.06-8.08	+0.160
Brent Blend (May)	$17.51-7.53q	+0.180
W.T.I. (1pm est)	$19.17-9.19q	+0.220

■ OIL PRODUCTS NWEprompt delivery CIF (tonne)

Premium Gasoline	$190-191	+2
Gas Oil	$154-155	+1
Heavy Fuel Oil	$97-98	
Naphtha	$166-167	-1
Jet fuel	$173-175	
Diesel	$154-155	-0.5

Petroleum Argus. Tel. London (0171) 359 8792

■ OTHER

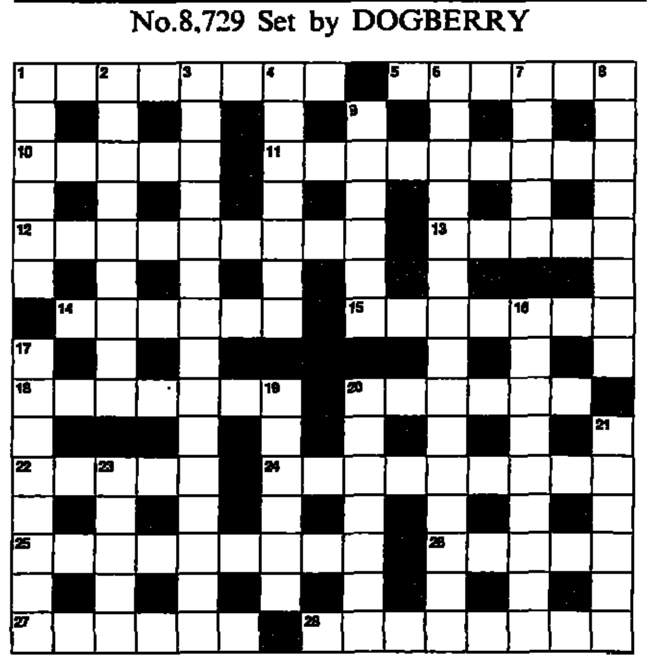
Gold (per troy oz)♣	$391.90	
Silver (per troy oz)♣	529.50c	+1.00
Platinum (per troy oz.)	$445.75	+3.75
Palladium (per troy oz.)	$174.75	+2.00
Copper (US prod.)	145.0c	+1.0
Lead (US prod.)	41.75c	
Tin (Kuala Lumpur)	14.50m	+0.21
Tin (New York)	278.50c	+2.00
Cattle (live weight)†	125.25p	+1.67*
Sheep (live weight)†♠	132.38p	+2.99*
Pigs (live weight)†	91.08p	-0.26*
Lon. day sugar (raw)	$366.4	+1.4
Lon. day sugar (wte)	$372.0	-3.0
Tate & Lyle export	£342.0	+2.0
Barley (Eng. feed)	£117.0	
Maize (US No3 Yellow)	£141.0	
Wheat (US Dark North)	£165.0	
Rubber (Apr)♥	122.00p	
Rubber (May)♥	122.00p	
Rubber (KL RSS No1)	474.0m	+1.5
Coconut Oil (Phil)§	$820.0u	
Palm Oil (Malay.)§	$660.0z	
Copra (Phil)§	$412.0u	
Soyabeans (US)	£170.0y	+4.0
Cotton Outlook'A' index	108.40c	
Wooltops (64s Super)	522p	

£ per tonne unless otherwise stated. p pence/kg. c cents/lb. r ringgit/kg. m Malaysian cents/kg. u Apr/May z Apr. y Mar/Apr. q May ♥ London Physical. § CIF Rotterdam. ♣ Bullion market close. ♠ Sheep (Live weight prices). * Change on week † Prices are for previous day.

JOTTER PAD

CROSSWORD

No.8,729 Set by DOGBERRY



ACROSS

1 A drinker about to come round in a stupor (8)
5 Fabric keeping many calm (6)
10 Join together, turn it round and separate (5)
11 Uncoordinated amateur to throw back in like this (9)
12 Make speech packing loud punch (9)
13 One getting in the way got a move on (5)
14 Related to wooden barrel (6)
15 Kazan, too, not overturned, having stabiliser (7)
18 United almost wake up, putting pressure on (7)
20 Stand up to one in French port (6)
22 On holiday by a beginner's lights, say (5)
24 Where churchman may be burning to be embraced by servant (9)
25 Hurries back with the general sense of spray (9)
26 Realism is missing from the nation (5)
27 Little ones make a mess (6)
28 Backward oaf irritates the confectionery (8)

DOWN

1 Heavy and swelling in empty conservatory (6)
2 Vehicle for ministry, globe and president (5,4)
3 On account of which we flee God and trek on abandoned? (4,2,9)
4 Keep complier and solver up to the mark (7)
6 T. Blair (Com) – leader of another party (7,8)
7 Losing shattered halo, addict gets disease (5)
8 Corrupt but respectable, receiving publicity (8)
9 Compiler in vehicle with a tourist's accoutrement (6)
16 Painter on expedition to capture model of cult figure (3,6)
17 Massive business failure in natural reserve (8)
19 Pussy looking up quotes about pig's head (6)
20 Bitter about a headpiece (7)
21 Join American with Irishman (6)
23 Indistinct collapse (5)

Solution 8,728

	W	I	N	D	O	W	S	H	O	P	P	I	N	G
S		N		O		I		U		A		N		L
T	O	D	D	Y		D	E	N	I	G	R	A	T	E
A		E		E		O		C		E		P		A
L	U	C	K	N	O	W		H	E	A	R	T	E	N
A		O				H				N				E
G	I	R	T	H		O	V	E	R	T	I	R	E	D
		U		A		O		V		R		E		
C	A	M	B	R	I	D	G	E		Y	A	H	O	O
O				B				R				E		C
R	E	S	C	I	N	D		G	A	R	B	A	G	E
A		T		N		A		R		U		R		A
C	O	U	R	G	E	T	T	E		M	A	S	O	N
L		M		E		U		E		B		A		S
E	X	P	E	R	I	M	E	N	T	A	L	L	Y	

INTERNATIONAL CAPITAL MARKETS

Treasuries rise further as dollar stabilises

By Lisa Bransten in New York and Graham Bowley in London

US Treasury prices added to Monday's gains yesterday morning as the dollar inched further off its recent record lows and new economic data added to the accumulating mass of evidence that the economy is slowing.

Near midday, the benchmark 30-year Treasury was up $\frac{5}{32}$ at $102\frac{29}{32}$ to yield 7.376 per cent. At the short end of the market, the two-year note gained $\frac{1}{16}$ to $99\frac{21}{32}$, yielding 6.692 per cent.

On Monday, the Treasury market posted modest gains on positive economic data, even as the dollar ignored the best efforts of the Federal Reserve and the Bank of Japan and hit a new low against the yen.

Yesterday, the mood on the market was still bullish as the dollar stabilised at higher levels against the yen and the D-Mark. In morning trading, the dollar was changing hands at Y86.30 and DM1.3835, against Y86.13 and DM1.3724 late on Monday in New York.

Speculation that the Fed might buy medium-term bonds such as five-year notes, caused bonds of those maturities to outperform the rest of the market on Monday and yesterday morning, according to Mr Richard Gilhooly of Paribas Capital Markets in New York.

The yield spread between two-year and five-year notes had narrowed to just 27 basis points by late yesterday morning.

Bonds also got a boost from figures showing construction spending had fallen by 0.5 per cent in February, almost exactly as economists had forecast.

■ Italian and Spanish government bonds rose sharply yesterday, as the recent downward pressure on the lira and peseta eased.

The Italian June futures contract on Liffe settled at 94.30, up 1.02 points. The yield spread over 10-year German government bonds finished the day at around 633 basis points.

The Spanish 10-year benchmark bond rose by more than 1 point, as the yield spread over German bunds narrowed to around 502 basis points.

Concerns over the weak currency and the government's progress on pension reform pushed the Italian market lower on Monday.

"Currency pressures have now abated somewhat but the market remains nervous about the pension reforms," said Mr Ken Wattret, an international economist at HSBC Markets.

GOVERNMENT BONDS

A government announcement on its proposals for pension reform are expected today but traders remain nervous.

"There is definitely room for disappointment, with a divergence in opinion between government and trade unions on the reforms," said Mr Wattret.

■ Elsewhere in Europe, government bond markets were dragged higher by the improvement in the German bund and US Treasury markets.

The German 10-year benchmark bond yield closed at 7.06 per cent. The June bund futures contract on Liffe rose by 0.3 to 92.72.

Traders said that the strength of the D-Mark and the steepness of the German yield curve are attracting investors to the bund market, particularly to the longer-dated maturities.

■ French government bonds followed Germany higher, with the yield spread over 10-year bunds stable at around 74 basis points. A firmer franc provided some support for the market, traders said.

The June futures contract on Matif settled at 113.28, up 0.22 on the day.

■ UK government bonds closed higher as sterling recovered from its earlier lows.

The long gilt future on Liffe rose by $\frac{6}{32}$ to settle at $103\frac{5}{8}$. Gains were seen throughout the yield curve, traders said but the spread over bunds widened slightly to 154 basis points.

Mr Andrew Roberts, a gilts analyst at UBS in London, said that some gilt investors have begun to lengthen the duration of their holdings, switching from the 10-year area, which has benefited most from the recent, largely futures-led, rally in gilts, into the 20-year area of the yield curve.

The market's attention today will be on the monthly meeting between Mr Eddie George, the governor of the Bank of England, and Mr Kenneth Clarke, the chancellor of the exchequer, when they discuss interest rate policy. However, traders expect no changes to be made to monetary policy.

"Recent economic indicators have been mixed and the Bank does not appear too concerned about the level of sterling," said Mr Philip Shaw, an economist at Union Discount. "The authorities will want to wait for more economic data before changing interest rates," he said.

Hoechst scales down IPO for SGL Carbon offshoot

By Antonia Sharpe

The sale of shares by SGL Carbon, a subsidiary of Hoechst, Germany's largest chemicals and pharmaceuticals company, was scaled down yesterday because Hoechst was not prepared to sell out too cheaply.

SGL is the latest international equity offering to be withdrawn or scaled down in recent months due to declining stock markets and a reluctance among investors to buy shares in companies with cyclical earnings.

The subsidiary is a leading player in the DM7bn worldwide carbon and graphite market and its main customers are in the steel industry.

Dresdner Bank and Kleinwort Benson, arrangers of the deal, said Hoechst's decision not to participate meant the offering had been reduced from 7.2m shares to 5.6m.

The shares are expected to be priced between DM55 and DM57 each, the bottom of the indicated DM55 to DM66 price range. This means the deal will only raise around DM314m, down from an original target of at least DM400m.

INTERNATIONAL EQUITY ISSUES

The arranging banks said that, although the deal had been oversubscribed for the original amount, Hoechst had not been prepared to sell at this price. The company had also decided to reduce the size of the issue to secure a successful deal.

Of the revised amount on offer, 2.9m shares are being sold by SGL in order to raise new capital and just under 2m shares are being sold by Péchiney, the French packaging and metals group, which has a stake of 11 per cent in the carbon company.

The remaining 700,000 shares, or 15 per cent of the total, will be sold by Hoechst in the form of a "green shoe," or over-allotment, option which it was obliged to fulfil.

Hoechst had planned to use the flotation to reduce its stake in SGL from 89 per cent to 50 per cent plus one share of SGL's increased share capital. But now it will be left with a stake of around 70 per cent.

Observers said Hoechst was not under pressure to sell its shares in SGL and that the proceeds would have played only a small part in the planned $7.15bn acquisition of Marion Merrell Dow, the US drugs company.

They added that Hoechst could explore the possibility of selling its interest in SGL to a trade buyer who might be prepared to pay a premium to the market price.

Japan Highway in 10-year dollar deal

By Martin Brice

Investors showed appetite for dollar-denominated assets yesterday, with two deals totalling $1bn being launched.

Japan Highway brought the first issue from a Japanese borrower of the fiscal year and the first Japan government-guaranteed deal of 1995 when it launched its $500m 10-year deal, which carried a coupon of 7.5 per cent.

INTERNATIONAL BONDS

Other houses said the pricing of 32 basis points over Treasuries was correct, and lead manager IBJ said most buyers had used cash, rather than switching from other bonds. When free to trade, the price remained stable.

Around 35 per cent of the deal was placed in Asia, with the rest in Europe, the Middle East and the US.

A 10-year dollar new issue has been a rarity in recent weeks, partly due to the lack of swap opportunities. However, swap spreads in the 10-year dollar sector widened last week before tightening slightly on Monday. Japan Highway is believed to have swapped into floating-rate yen.

Meanwhile, Argentaria Global Finance used Lehman Brothers to bring its $500m two-year floating-rate note with a coupon of $\frac{1}{16}$ per cent under three-month Libor.

Lehman said it had a large institutional investor looking for a AA rated two-year FRN before it brought the deal.

The Germanic flavour of recent days continued with a DM250m five-year bond yielding 6⅝ per cent from De Nationale Investeringsbank, the Dutch bank. Demand from the Benelux region and Switzerland was said to be strong, attracted by the yield.

The Peabody Trust, a UK housing association, issued a £50m 28-year domestic bond via NatWest Markets with a coupon of 10.25 per cent.

Peabody, which has 13,000 houses and a balance sheet of around £900m, already has a £100m issue outstanding at around 125 basis points over the comparable gilt. Yesterday's issue carried a guarantee from Ambac, the US monoline insurer, which gave the bonds an AAA rating. This allowed a launch spread of 80 over.

NEW INTERNATIONAL BOND ISSUES

Borrower	Amount m.	Coupon %	Price	Maturity	Fees %	Spread bp	Book runner
US DOLLARS							
Japan Highway Public Corp.(a)	500	7.50	99.582R	Apr.2005	0.325R	+32(7½%-05)	IBJ International
Argentaria Global Finance‡	500	(b)	99.95R	Apr.1997	0.08R	-	Lehman Brothers Intl.
International Finance Corp.	50	5.00	95.51	Apr.1998	undiscl.	-	Nikko Europe
D-MARKS							
De Nationale Investeringsbank	250	6.625	102.105	May.2000	2.00	-	ABN Amro/ Commerzbank
International Finance Corp.	50	5.00	98.35	Apr.1998	undiscl.	-	Nikko Bank (Deutschland)
SWISS FRANCS							
City of Vienna(c)★	100	5.25	102.875	Apr.2001	1.825	-	Bk.von Ernst/Merrill Lynch
LUXEMBOURG FRANCS							
DSL Finance(d)	2bn	7.625	102.40	Aug.2003	2.00	-	Crédit Européen
Kredietbank Luxembourg(d)	2bn	7.375	102.50	Jul.2001	1.875	-	Kredietbank Luxembourg
AUSTRALIAN DOLLARS							
Treas.Corp.of New Sth.Wales★	100	4.50#	89.438	Apr.1998	1.375	-	Nomura International

Final terms, non-callable unless stated. Yield spread (over relevant government bond) at launch supplied by lead manager. ★Unlisted. ‡ Floating-rate note. #Semi-annual coupon. R: fixed re-offer price; fees shown at re-offer level. a) Short 1st coupon. b) 3-mth Libor $-\frac{1}{16}$%. c) SFr200m launched 16/3/95 was increased to SFr300m. d) Long 1st coupon.

Simex shrugs off Barings crisis

By Laurie Morse in Chicago

The Singapore International Monetary Exchange may have suffered negative publicity from the Barings crisis, but its role in making Singapore a primary financial centre in Asia has not been diminished.

First-quarter turnover was up 27 per cent to 7.5m contracts, demonstrating that customers have not shied away from the exchange.

More important, two London exchanges are going ahead with plans for partnerships with the Singapore exchange. The links promise to raise Simex's profile in east Asia, where it is the fourth-largest futures exchange.

Simex's involvement in the Barings crisis has had no impact on the International Petroleum Exchange's plans to link its Brent crude oil futures contract with Simex on June 9, said Mr Peter Wildblood, IPE chief executive. "Once the problem came to light, Simex cleared the situation up quickly and admirably."

The IPE's partnership with Simex is the most extensive link attempted between futures exchanges in more than a decade. Identical Brent contracts will be traded on both trading floors, and the London Clearing House and the Simex's clearing house will also link, jointly settling contracts.

IPE is anxious for an Asian presence because the east Asia is the fastest growing region of oil consumption. "We chose Simex because Singapore is a major centre for oil refining, and because there were a number of synergies between our exchanges," said Mr Wildblood.

Mr David Hardy, chief executive of the London Clearing House, said the agreement contained extensive risk management structures. "The two clearing houses will have equal and offsetting exposure to each other, but we will make sure there is protection so there is no sort of risk contagion from either side."

The clearing house link could pave the way for other London/Simex ventures. Liffe is already in talks to share its euromark futures contract with Simex and is exploring other areas of co-operation.

The success of Chicago Mercantile Exchange's 11-year link with Simex has not been lost on Liffe. The link has helped make Chicago eurodollars the largest futures contract in the world, generating 8.7m contracts for Simex last year.

WORLD BOND PRICES

BENCHMARK GOVERNMENT BONDS

		Coupon	Red Date	Price	Day's change	Yield	Week ago	Month ago
Australia		9.000	09/04	85.1300	+0.580	9.80	10.07	10.18
Austria		7.500	01/05	100.6300	+0.220	7.40	7.41	7.65
Belgium		6.500	03/05	90.5300	+0.250	7.91	8.06	8.22
Canada *		9.000	12/04	101.4000	+0.100	8.78	8.79	8.73
Denmark		7.000	12/04	88.4000	+0.150	8.82	8.91	8.80
France	BTAN	8.000	05/98	101.0900	+0.050	7.59	7.60	7.27
	OAT	7.500	04/05	98.0400	+0.250	7.78	7.71	7.97
Germany Bund		7.375	01/05	102.1200	+0.250	7.06	7.17	7.36
Ireland		6.250	10/04	82.8000	+0.250	8.82†	8.81	8.80
Italy		9.500	01/05	80.7400	+0.490	13.05	12.93	12.19
Japan	No 119	4.800	06/99	106.4610	+0.557	2.67	3.11	3.80
	No 174	4.600	09/04	108.3460	-0.200	3.43	3.71	4.42
Netherlands		7.750	03/05	103.8000	+0.440	7.20	7.31	7.50
Portugal		11.875	02/05	98.7000	+0.050	12.09	12.41	11.65
Spain		10.000	02/05	88.3800	+1.020	12.06	12.43	11.53
Sweden		6.000	02/05	68.4920	+0.577	11.51	11.34	10.67
UK Gilts		6.000	08/99	91-28	+2/32	8.27	8.37	8.47
		8.500	12/05	100-23	+6/32	8.40	8.49	8.55
		9.000	10/08	104-22	+7/32	8.41	8.49	8.54
US Treasury *		7.500	02/05	102-20	+3/32	7.12	7.11	7.26
		7.625	02/25	102-28	+2/32	7.38	7.37	7.50
ECU (French Govt)		6.000	04/04	85.9200	+0.320	8.27	8.40	8.42

London closing. *New York mid-day. Yields: Local market standard.
† Gross (including withholding tax at 12.5 per cent payable by nonresidents)
Prices: US, UK in 32nds, others in decimal. Source: MMS International

US INTEREST RATES

Lunchtime

Prime rate	9
Broker loan rate	6½
Fed.funds	6⅛
Fed.funds at intervention	6⅛

Treasury Bills and Bond Yields

One month	5.77	Two year	6.71
Two month	5.81	Three year	6.82
Three month	5.92	Five year	6.96
Six month	6.15	10-year	7.11
One year	6.40	30-year	7.37

BOND FUTURES AND OPTIONS

France

■ NOTIONAL FRENCH BOND FUTURES (MATIF) FFr500,000

	Open	Sett price	Change	High	Low	Est. vol.	Open int.
Jun	113.12	113.28	+0.22	113.54	113.10	133,323	115,809
Sep	112.60	112.68	+0.16	112.68	112.58	273	6,856
Dec	112.50	112.58	+0.16	112.64	112.50	9	1,058

■ LONG TERM FRENCH BOND OPTIONS (MATIF)

Strike Price	Calls May	Calls Jun	Calls Sep	Puts May	Puts Jun	Puts Sep
111	-	-	-	0.18	0.36	1.13
112	-	1.85	1.58	0.34	0.59	1.41
113	0.85	1.16	-	0.67	0.89	1.85
114	0.46	0.67	-4	-	-	-
115	0.17	0.35	0.50	-	-	-

Est. vol. total, Calls 18,671 Puts 61,320. Previous day's open int., Calls 734,851 Puts 193,985.

Germany

■ NOTIONAL GERMAN BUND FUTURES (LIFFE)* DM250,000 100ths of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	92.49	92.72	0.30	92.88	92.44	123820	175794
Sep	92.30	92.22	0.31	92.30	92.23	17	2317

■ BUND FUTURES OPTIONS (LIFFE) DM250,000 points of 100%

Strike Price	Calls May	Calls Jun	Calls Jul	Calls Sep	Puts May	Puts Jun	Puts Jul	Puts Sep
9250	0.61	0.92	0.83	1.10	0.39	0.70	1.11	1.38
9300	0.36	0.67	0.62	0.88	0.64	0.95	1.40	1.66
9350	0.20	0.47	0.45	0.69	0.98	1.25	1.73	1.97

Est. vol. total, Calls 23277 Puts 10261. Previous day's open int., Calls 142851 Puts 125818

Italy

■ NOTIONAL ITALIAN GOVT. BOND (BTP) FUTURES (LIFFE)* Lira 200m 100ths of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	93.35	94.30	+1.02	94.40	93.12	32958	48687
Sep		93.65	1.02			0	137

■ ITALIAN GOVT. BOND (BTP) FUTURES OPTIONS (LIFFE) Lira200m 100ths of 100%

Strike Price	Calls Jun	Calls Sep	Puts Jun	Puts Sep
9400	1.75	2.54	1.45	2.89
9450	1.48	2.31	1.68	3.16
9500	1.23	2.10	1.93	3.45

Est. vol. total, Calls 1225 Puts 1114. Previous day's open int., Calls 41979 Puts 32027

Spain

■ NOTIONAL SPANISH BOND FUTURES (MEFF)

	Open	Sett price	Change	High	Low	Est. vol.	Open int.
Jun	81.80	81.77	+0.95	82.88	81.80	52,604	49,490

UK

■ NOTIONAL UK GILT FUTURES (LIFFE)* £50,000 32nds of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	103-21	103-20	+0-06	103-27	103-14	37550	86441
Sep		103-11	+0-07			0	105

■ LONG GILT FUTURES OPTIONS (LIFFE) £50,000 64ths of 100%

Strike Price	Calls May	Calls Jun	Calls Jul	Calls Sep	Puts May	Puts Jun	Puts Jul	Puts Sep
103	1-06	1-37	1-45	2-11	0-30	0-61	1-23	1-53
104	0-35	1-02	1-14	1-44	0-59	1-26	1-58	2-22
105	0-16	0-40	0-54	1-19	1-40	2-00	2-32	2-61

Est. vol. total, Calls 9317 Puts 4376. Previous day's open int., Calls 35890 Puts 47574

Ecu

■ ECU BOND FUTURES (MATIF) ECU100,000

	Open	Sett price	Change	High	Low	Est. vol.	Open int.
Jun	82.90	82.86	+0.24	83.22	82.86	2,549	8,222

US

■ US TREASURY BOND FUTURES (CBT) $100,000 32nds of 100%

	Open	Latest	Change	High	Low	Est. vol.	Open int.
Jun	104-19	104-23	+0-05	104-27	104-13	271,967	336,868
Sep	104-01	104-10	+0-05	104-13	104-01	492	17,148
Dec	103-29	103-29	+0-05	103-29	103-26	14	1,528

Japan

■ NOTIONAL LONG TERM JAPANESE GOVT. BOND FUTURES (LIFFE) Y100m 100ths of 100%

	Open	Close	Change	High	Low	Est. vol	Open int.
Jun	115.90			115.95	115.35	3001	0

* LIFFE futures also traded on APT. All Open interest figs. are for previous day.

FT-ACTUARIES FIXED INTEREST INDICES

Price Indices UK Gilts	Tue Apr 4	Day's change %	Mon Apr 3	Accrued interest	xd adj. ytd		Low coupon yield Apr 4	Apr 3	Yr. ago	Medium coupon yield Apr 4	Apr 3	Yr. ago	High coupon yield Apr 4	Apr 3	Yr. ago
1 Up to 5 years (24)	119.85	+0.11	119.72	1.84	2.89	5 yrs	8.32	8.36	7.23	8.38	8.43	7.47	8.52	8.56	7.61
2 5-15 years (21)	141.17	+0.29	140.76	1.83	3.58	15 yrs	8.35	8.39	7.67	8.42	8.47	7.77	8.63	8.68	8.02
3 Over 15 years (9)	157.94	+0.54	157.09	1.87	4.05	20 yrs	8.33	8.37	7.77	8.42	8.47	7.77	8.58	8.63	7.96
4 Irredeemables (6)	182.00	+0.35	181.36	3.55	1.47	Irred.†	8.38	8.41	7.92						
5 All stocks (60)	137.96	+0.28	137.58	1.92	3.41										

Index-linked							Inflation 5% Apr 4	Apr 3	Yr. ago	Inflation 10% Apr 4	Apr 3	Yr. ago
6 Up to 5 years (2)	190.79	+0.07	190.67	0.02	2.57	Up to 5 yrs	3.44	3.46	3.21	2.04	2.06	2.30
7 Over 5 years (11)	176.77	+0.20	176.41	0.85	1.28	Over 5 yrs	3.84	3.86	3.41	3.65	3.66	3.23
8 All stocks (13)	177.32	+0.19	176.98	0.77	1.40							

Average gross redemption yields are shown above. Coupon Bands: Low: 0%-7¾%; Medium: 8%-10¾%; High: 11% and over. † Flat yield. ytd Year to date.

FT FIXED INTEREST INDICES

	Apr 4	Apr 3	Mar 31	Mar 30	Mar 29	Yr ago	High*	Low*
Govt. Secs. (UK)	92.13	91.87	91.57	91.98	91.42	97.20	92.13	90.22
Fixed Interest	110.84	110.63	110.67	110.48	110.34	117.27	110.84	108.77

* for 1995. Government Securities high since compilation: 127.40 (9/1/35), low 49.18 (3/1/75). Fixed Interest high since compilation: 133.87 (21/1/94), low 50.53 (3/1/75). Basis 100: Government Securities 15/10/26 and Fixed Interest 1928. SE activity indices rebased 1974.

GILT EDGED ACTIVITY INDICES

	Apr 3	Mar 31	Mar 30	Mar 29	Mar 28
Gilt Edged bargains	98.4	98.2	108.5	110.0	94.4
5-day average	101.9	101.7	99.6	98.9	94.1

FT/ISMA INTERNATIONAL BOND SERVICE

Listed are the latest international bonds for which there is an adequate secondary market. Latest prices at 7:10 pm on April 4

	Issued	Bid	Offer	Chg.	Yield
U.S. DOLLAR STRAIGHTS					
Abbey Natl Treasury 6½ 03	1000	92¼	93	+¼	7.73
Alberta Province 7⅞ 98	1000	101	101¼	+⅛	7.28
Austria 8½ 00	400	104¾	105	+⅛	7.28
Baden-Wuertt L-Fin 8⅛ 00	1000	103	103¼	+⅛	7.35
Bank Ned Gemeenten 7 99	1000	99½	99⅝	+⅛	7.12
[illegible]					
United Kingdom 7⅛ 97	5500	103	103¼	+⅛	5.81
Volkswagen Intl Fin 7 03	1000	96⅝	97¼	+⅜	7.56
World Bank 0 15	2000	22	22½	+¼	7.58
World Bank 5⅞ 03	3000	91½	91⅝	+⅛	7.23
World Bank 8⅝ 00	1250	110⅝	111⅛	+⅛	6.23
[illegible]					
Abbey Natl Treasury 8 03 £	1000	93⅝	93⅞	+⅛	9.18
Alliance Leics 11⅜ 97 £	100	105⅜	105⅝		8.45
British Land 8⅞ 23 £	150	89¼	89⅝	+⅛	10.27
Denmark 6¾ 98 £	800	94¾	95	+⅛	8.58
EIB 8 03 £	1000	95⅛	95¼	+⅛	8.85
Halifax 10⅜ 97 £	100	103½	103⅞		9.30
[illegible]					

UK GILTS PRICES

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CURRENCIES AND MONEY

MARKETS REPORT

Fed intervention helps stabilise the dollar

The dollar had a better day on the markets yesterday following the intervention undertaken on Monday by the US Federal Reserve, *writes Philip Gawith.*

There was no follow-up yesterday, but the threat of central bank support was sufficient to dissuade the market from selling the dollar aggressively. The dollar gained more than a pfennig to finish in London at DM1.3854, from DM1.3723. Against the yen it closed at ¥86.485, nearly a yen higher than the post-war low of ¥85.55 reached in late New York trading on Monday.

In Europe the D-Mark continued its recent softer trend following the cut in German interest rates last week. It lost ground against most currencies, finishing at FFr3.498 against the French franc, from FFr3.505, and at L1,245, from L1,254, against the lira.

Sterling lost ground against the firmer dollar, finishing at $1.605 from $1.6169, with traders citing political worries ahead of tomorrow's local elections in Scotland as a factor. It was firmer against the D-Mark, closing at DM2.2234, from DM2.2187.

■ The market's view that the Fed is fairly relaxed about the level of the dollar is probably fairly close to the mark. The reasoning of Mr Carl Weinberg, chief economist at High Frequency Economics in New York, could serve as a rough approximation of how the Fed is looking at the dollar.

He says: "The dollar continues to run strong against the peso and the Canadian dollar, which means a more balanced perspective shows the greenback only gently sliding. Prices in the United States are stable by most measures. Treasury prices are rising, so you cannot argue that the government is having trouble funding its deficit. The stock market rose 10.72 points (on Monday)."

"This is no dollar crisis," concludes Mr Weinberg. He says the Fed should not be trying to help the dollar by raising interest rates. "What is happening out there is much more severe for Germany and Japan, whose currencies are unambiguously rising."

Accordingly, he predicts little response from the US authorities in the short term, save for "token Fed intervention to stabilise jittery markets."

■ In the UK all eyes will be on the monthly monetary meeting between Mr Eddie George, governor of the Bank of England, and Mr Kenneth Clarke, the chancellor.

Judging by the recent performance of short sterling futures, there is little likelihood of an increase in rates following today's meeting. The June contract closed at 92.80, discounting a rise in interest rates of only 45 basis points between now and June.

This represents a sharp turnaround in sentiment over the past quarter. Indeed, some economists believe the market is excessively sanguine about the likely path of interest rates. This represents a big shift from 1994 when the short sterling market was considerably more pessimistic than most economists.

Mr Ian Harnett, UK group chief economist at Societe Generale in London, says today's decision will be very finely balanced with, if anything, the risk of a tightening.

Some observers believe that the Scottish elections on Thursday will serve as a reason to leave rates on hold. References by Mr George to signs of the economy slowing are also taken as a pointer towards leaving rates unchanged.

But Mr Harnett is less sure. He believes that such comments are no more than a case of a central banker trying to maintain a semblance of policy neutrality, so that any change in rates will catch the market by surprise.

He argues that inflation in the upper half of the target range, and recent signs of economic strength, such as the rate of growth in M0 money supply, favour tightening.

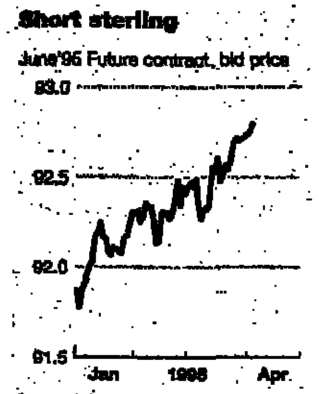
The trade weighted value of sterling has also fallen by about 4.6 per cent since rates were last raised on February 2, which effectively undermines much of the monetary tightening undertaken by the Bank over the past six months.

"The Bank won't want to just link it to the currency," said Mr Harnett. For this reason, he said, the authorities might wait until there was a suitable peg on which to hang a rate increase. "If we don't see an interest rate increase this month, though, we will see one next month," said Mr Harnett.

The Bank of England cleared a £300m money market shortage in its daily operations.

Short sterling

June'95 Future contract, bid price



Source: FT Graphite

■ **Pound in New York**

Apr 4	Latest	Prev. close
£ spot	1.6000	1.6166
1 mth	1.5988	1.6164
3 mth	1.5968	1.6173
1 yr	1.5862	1.6076

■ **OTHER CURRENCIES**

Apr 4	£	$
Hungary	190.214 - 190.481	118.550 - 118.650
Iran	2801.42 - 2807.88	1745.00 - 1750.00
Kuwait	0.4592 - 0.4698	0.2924 - 0.2925
Poland	3.7561 - 3.7615	2.3410 - 2.3430
Russia	7895.35 - 7895.75	4916.00 - 4921.00
U.A.E.	5.8928 - 5.8968	3.6727 - 3.6731

POUND SPOT FORWARD AGAINST THE POUND

Apr 4		Closing mid-point	Change on day	Bid/offer spread	Day's Mid high	Day's Mid low	One month Rate	One month %PA	Three months Rate	Three months %PA	One year Rate	One year %PA	Bank of Eng. Index
Europe													
Austria	(Sch)	15.6470	+0.0335	381 - 559	15.7181	15.6006	15.6264	1.6	15.5883	1.5	-	-	108.3
Belgium	(BFr)	45.7090	+0.0863	801 - 378	45.8990	45.3780	45.739	-0.8	45.609	0.9	45.199	1.1	111.0
Denmark	(DKr)	8.7976	+0.0177	923 - 029	8.8463	8.7407	8.8032	-0.8	8.8117	-0.6	8.7969	0.0	110.2
Finland	(FM)	6.9061	-0.0858	002 - 120	6.9930	6.8780	-	-	-	-	-	-	87.6
France	(FFr)	7.7767	-0.0011	733 - 801	7.8138	7.7422	7.7874	-1.7	7.7997	-1.2	7.7585	0.3	111.1
Germany	(DM)	2.2234	+0.0047	222 - 246	2.2349	2.2052	2.2201	1.8	2.2129	1.9	2.1698	2.4	114.1
Greece	(Dr)	363.281	+0.379	494 - 068	365.100	361.913	-	-	-	-	-	-	69.3
Ireland	(I£)	0.9992	-0.0008	976 - 007	1.0011	0.9964	0.999	0.2	0.9986	0.2	0.9992	0.0	95.8
Italy	(L)	2767.34	-14.85	536 - 932	2794.93	2753.54	2776.59	-4.9	2799.84	-4.7	2888.14	-4.3	63.8
Luxembourg	(LFr)	45.7090	+0.0863	801 - 378	45.8990	45.3780	45.739	-0.8	45.609	0.9	45.199	1.1	111.0
Netherlands	(Fl)	2.4893	+0.0033	870 - 916	2.5006	2.4699	2.4857	1.7	2.4781	1.8	2.4331	2.3	110.8
Norway	(NKr)	9.9628	+0.0108	572 - 684	10.0299	9.9098	9.9524	1.2	9.9321	1.2	9.8259	1.4	100.1
Portugal	(Es)	235.189	+0.301	043 - 336	236.410	233.792	236.024	-4.3	237.814	-4.5	-	-	96.9
Spain	(Pta)	203.909	-0.744	756 - 062	205.252	203.647	204.439	-3.1	205.459	-3.0	209.994	-3.0	77.7
Sweden	(SKr)	11.8735	-0.0326	650 - 820	12.0034	11.8578	11.8756	-0.2	11.8797	-0.2	11.8999	-0.2	76.4
Switzerland	(SFr)	1.8273	+0.0116	259 - 286	1.8339	1.8094	1.8226	3.1	1.8128	3.2	1.7587	3.8	115.6
UK	(£)	-	-	-	-	-	-	-	-	-	-	-	84.8
Ecu	-	1.2174	+0.0022	168 - 180	1.2231	1.2120	1.2173	0.1	1.2175	0.0	1.2123	0.4	-
SDR†	-	1.032900	-	-	-	-	-	-	-	-	-	-	-
Americas													
Argentina	(Peso)	1.6048	-0.0124	040 - 051	1.6195	1.6035	-	-	-	-	-	-	-
Brazil	(R$)	1.4445	-0.0115	424 - 465	1.4645	1.4424	-	-	-	-	-	-	-
Canada	(C$)	2.2397	-0.0245	386 - 407	2.2667	2.2388	2.243	-1.8	2.2492	-1.7	2.302	-2.8	81.1
Mexico	(New Peso)	10.7291	-0.2251	020 - 562	10.9431	10.7020	-	-	-	-	-	-	-
USA	($)	1.6050	-0.0119	045 - 054	1.6200	1.6038	1.6048	0.1	1.6038	0.3	1.594	0.7	89.4
Pacific/Middle East/Africa													
Australia	(A$)	2.1901	-0.0135	887 - 914	2.1915	2.1887	2.1923	-1.2	2.1975	-1.3	2.2191	-1.3	79.9
Hong Kong	(HK$)	12.4099	-0.0913	060 - 138	12.5254	12.4014	12.4093	0.1	12.4101	0.0	12.4034	0.1	-
India	(Rs)	50.3874	-0.4707	492 - 256	50.9330	50.3492	-	-	-	-	-	-	-
Israel	(Shk)	4.7582	-0.0205	528 - 635	4.7871	4.7528	-	-	-	-	-	-	-
Japan	(Y)	138.804	-0.552	725 - 883	139.820	138.580	138.234	4.9	137.084	5.0	130.974	5.6	165.9
Malaysia	(M$)	4.0498	-0.0329	474 - 512	4.0900	4.0472	-	-	-	-	-	-	-
New Zealand	(NZ$)	2.4500	-0.0188	474 - 525	2.4526	2.4474	2.4551	-2.5	2.4656	-2.5	2.4857	-1.5	98.7
Philippines	(Peso)	41.7288	-0.3094	961 - 615	42.0815	41.3961	-	-	-	-	-	-	-
Saudi Arabia	(SR)	6.0194	-0.045	174 - 214	6.0758	6.0154	-	-	-	-	-	-	-
Singapore	(S$)	2.2603	-0.0157	588 - 617	2.2806	2.2588	-	-	-	-	-	-	-
South Africa	(R)	5.7630	-0.0347	602 - 658	5.8093	5.7592	-	-	-	-	-	-	-
South Korea	(Won)	1238.46	-8.7	787 - 905	1249.51	1237.81	-	-	-	-	-	-	-
Taiwan	(T$)	41.6180	-0.3065	951 - 409	41.9969	41.6951	-	-	-	-	-	-	-
Thailand	(Bt)	39.5300	-0.2607	028 - 571	39.8520	39.5028	-	-	-	-	-	-	-

†SDR rates per £ for Apr 3. Bid/offer spreads in the Pound Spot table show only the last three decimal places. Forward rates are not directly quoted to the market but are implied by current interest rates. Sterling index calculated by the Bank of England. Base average 1990 = 100. Index rebased 1/2/95. Bid, Offer and Mid-rates in both this and the Dollar Spot tables derived from THE WM/REUTERS CLOSING SPOT RATES. Some values are rounded by the F.T.

DOLLAR SPOT FORWARD AGAINST THE DOLLAR

Apr 4		Closing mid-point	Change on day	Bid/offer spread	Day's mid high	Day's mid low	One month Rate	One month %PA	Three months Rate	Three months %PA	One year Rate	One year %PA	J.P Morgan Index
Europe													
Austria	(Sch)	9.7492	+0.0926	464 - 520	9.7650	9.6205	9.7377	1.4	9.7177	1.3	9.6242	1.3	108.4
Belgium	(BFr)	28.4800	+0.263	700 - 900	28.5070	28.0920	28.4925	-0.5	28.445	0.5	28.355	0.4	110.7
Denmark	(DKr)	5.4816	+0.0513	798 - 833	5.4933	5.4142	5.4856	-0.9	5.4931	-0.8	5.5181	-0.7	109.4
Finland	(FM)	4.3030	-0.009	005 - 056	4.3426	4.2894	4.305	-0.6	4.3063	-0.3	4.3105	-0.2	85.8
France	(FFr)	4.8455	+0.036	447 - 462	4.8530	4.7950	4.8528	-1.8	4.8635	-1.5	4.866	-0.4	111.0
Germany	(DM)	1.3854	+0.0131	850 - 857	1.3875	1.3665	1.3838	1.6	1.38	1.6	1.3614	1.7	113.7
Greece	(Dr)	226.350	+1.9	300 - 400	227.400	224.300	228.65	-12.2	232.6	-11.0	249.85	-10.4	68.4
Ireland	(I£)	1.6063	-0.0107	043 - 083	1.6183	1.6043	1.6068	-0.4	1.6084	-0.5	1.6171	-0.7	-
Italy	(L)	1724.25	+3.82	350 - 500	1736.00	1715.60	1731.2	-4.8	1745.75	-5.0	1810.25	-5.0	82.7
Luxembourg	(LFr)	28.4800	+0.263	700 - 900	28.5070	28.0920	28.4925	-0.5	28.445	0.5	28.355	0.4	110.7
Netherlands	(Fl)	1.5510	+0.0135	500 - 520	1.5552	1.5310	1.5491	1.5	1.5453	1.5	1.5266	1.6	110.4
Norway	(NKr)	6.2076	+0.0521	058 - 093	6.2305	6.1208	6.2011	1.3	6.1913	1.0	6.1651	0.7	99.2
Portugal	(Es)	146.540	+1.265	490 - 590	146.790	144.680	147.14	-4.9	148.29	-4.8	153.59	-4.8	97.3
Spain	(Pta)	127.050	+0.475	990 - 110	127.450	126.250	127.37	-3.0	128.17	-3.5	131.925	-3.8	77.0
Sweden	(SKr)	7.3981	+0.0342	948 - 013	7.4463	7.3302	7.4123	-2.3	7.4441	-2.5	7.6131	-2.9	75.6
Switzerland	(SFr)	1.1385	+0.0155	380 - 390	1.1400	1.1165	1.1361	2.6	1.1306	2.8	1.105	2.9	115.2
UK	(£)	1.6050	-0.0119	045 - 054	1.6200	1.6038	1.6048	0.1	1.6038	0.3	1.594	0.7	84.3
Ecu	-	1.3184	-0.0121	181 - 186	1.3320	1.3182	1.318	0.3	1.3174	0.3	1.3149	0.3	-
SDR†	-	0.63830	-	-	-	-	-	-	-	-	-	-	-
Americas													
Argentina	(Peso)	0.9998	-0.0003	997 - 998	0.9998	0.9997	-	-	-	-	-	-	-
Brazil	(R$)	0.9000	-0.0005	990 - 010	0.9040	0.8990	-	-	-	-	-	-	-
Canada	(C$)	1.3955	-0.0049	952 - 957	1.3997	1.3952	1.3978	-2.0	1.4026	-2.0	1.444	-3.5	79.5
Mexico	(New Peso)	6.6850	-0.09	700 - 000	6.7000	6.6700	6.6872	-0.4	6.6904	-0.3	6.6953	-0.2	-
USA	($)	-	-	-	-	-	-	-	-	-	-	-	90.4
Pacific/Middle East/Africa													
Australia	(A$)	1.3644	+0.0016	641 - 650	1.3647	1.3528	1.3662	-1.6	1.371	-1.9	1.3956	-2.3	80.7
Hong Kong	(HK$)	7.7323	+0.0005	320 - 325	7.7325	7.7320	7.7312	0.2	7.7353	-0.2	7.7708	-0.5	-
India	(Rs)	31.3950	-0.06	800 - 100	31.4620	31.3800	31.475	-3.1	31.72	-4.1	-	-	-
Israel	(Shk)	2.9647	+0.0091	622 - 672	2.9672	2.9528	-	-	-	-	-	-	-
Japan	(Y)	86.4850	+0.295	600 - 100	86.7000	85.7500	86.155	4.6	85.485	4.6	82.19	5.0	156.6
Malaysia	(M$)	2.5230	-0.0018	225 - 235	2.5236	2.5197	2.521	1.0	2.5186	0.7	2.513	0.4	-
New Zealand	(NZ$)	1.5265	+0.0009	253 - 277	1.5277	1.5140	1.5303	-3.0	1.5383	-3.1	1.5616	-2.3	-
Philippines	(Peso)	26.0000	-	000 - 000	26.2000	25.8000	-	-	-	-	-	-	-
Saudi Arabia	(SR)	3.7505	-0.0002	503 - 507	3.7507	3.7503	3.7515	-0.3	3.7536	-0.3	3.7655	-0.4	-
Singapore	(S$)	1.4083	+0.0006	078 - 088	1.4090	1.4038	1.4031	4.5	1.3948	3.8	1.3683	2.8	-
South Africa	(R)	3.5906	+0.005	900 - 915	3.5915	3.5820	3.6086	-6.0	3.6461	-6.2	3.8401	-6.9	-
South Korea	(Won)	771.650	+0.3	500 - 800	771.800	770.700	774.65	-4.7	778.15	-3.4	796.65	-3.2	-
Taiwan	(T$)	25.9310	-	240 - 380	-	-	25.951	-0.9	25.991	-0.9	-	-	-
Thailand	(Bt)	24.6300	+0.02	200 - 400	24.6200	24.6000	24.651	-1.0	24.6775	-0.8	24.765	-0.5	-

†SDR rate per $ for Apr.3. Bid/offer spreads in the Dollar Spot table show only the last three decimal places. Forward rates are not directly quoted to the market but are implied by current interest rates. UK, Ireland & ECU are quoted in US currency. J.P. Morgan nominal indices Apr 3. Base average 1990=100

WORLD INTEREST RATES

MONEY RATES

April 4	Over night	One month	Three mths	Six mths	One year	Lomb. inter.	Dis. rate	Repo rate
Belgium	5 5/8	5 3/4	5 5/8	5 3/4	6 1/4	7.40	4.00	-
week ago	5 3/4	5 3/4	6 1/8	6 1/8	6 1/2	7.40	4.50	-
France	7 9/16	7 9/16	7 3/4	7 9/16	7 1/4	5.00	-	8.00
week ago	7 7/8	7 11/16	8	7 3/4	7 1/2	6.00	-	8.00
Germany	4.68	4.57	4.68	4.68	5.00	6.00	4.00	4.85
week ago	4.53	4.57	4.85	5.10	5.35	6.00	4.50	4.85
Ireland	5 3/4	6 5/16	6 7/8	7 1/8	7 5/8	-	-	6.25
week ago	5	6 5/16	6 5/8	7 1/4	7 5/8	-	-	6.25
Italy	10	10 3/4	11 1/8	11 3/8	11 3/4	-	7.50	10.44
week ago	10 3/4	10 3/4	11 1/4	11 1/2	11 7/8	-	7.50	10.15
Netherlands	4.56	4.68	4.74	4.87	5.18	-	5.25	-
week ago	4.87	4.88	5.07	5.19	5.44	-	5.25	-
Switzerland	3 3/4	3 5/8	3 1/4	3 3/8	3 1/2	6.625	3.00	-
week ago	3 1/2	3 5/8	3 3/4	3 7/8	4	6.625	3.50	-
US	6 1/4	6 1/4	6 1/4	6 3/8	6 7/8	-	5.25	-
week ago	6	6 1/4	6 1/8	6 3/4	6 3/4	-	5.25	-
Japan	2 1/4	1 13/16	1 5/8	1 5/8	1 5/8	-	1.75	-
week ago	2 1/4	1 13/16	1 13/16	1 3/4	1 13/16	-	1.75	-
■ $ LIBOR FT London								
Interbank Fixing	-	6 1/8	6 1/4	6 1/2	6 13/16	-	-	-
week ago	-	6 1/8	6 1/4	6 3/8	6 13/16	-	-	-
US Dollar CDs	-	5.93	6.08	6.30	6.63	-	-	-
week ago	-	5.93	6.12	6.24	6.49	-	-	-
SDR Linked Ds	-	4 5/16	5	5 1/8	5 1/4	-	-	-
week ago	-	4 5/16	4 1/2	4 3/4	4 13/16	-	-	-

ECU Linked Ds mid rates: 1 mth: 6 1/8; 3 mths: 6 3/4; 6 mths: 6 7/8; 1 year: 7. $ LIBOR interbank fixing rates are offered rates for $10m quoted to the market by four reference banks at 11am each working day. The banks are: Bankers Trust, Bank of Tokyo, Barclays and National Westminster.
Mid rates are shown for the domestic Money Rates, US $ CDs and SDR Linked Deposits (Ds).

EURO CURRENCY INTEREST RATES

Apr 4	Short term	7 days notice	One month	Three months	Six months	One year
Belgian Franc	5 3/8 - 5 1/4	5 1/2 - 5 3/8	5 9/16 - 5 7/16	5 11/16 - 5 9/16	5 13/16 - 5 11/16	6 3/16 - 6 1/16
Danish Krone	7 - 6 1/2	7 - 6 1/2	7 1/4 - 7	7 1/4 - 7	7 3/8 - 7 1/8	7 1/2 - 7 1/4
D-Mark	4 3/4 - 4 5/8	4 5/8 - 4 1/2	4 5/8 - 4 1/2	4 3/4 - 4 5/8	4 15/16 - 4 13/16	5 3/16 - 4 15/16
Dutch Guilder	4 7/16 - 4 5/16	4 5/8 - 4 1/2	4 11/16 - 4 9/16	4 7/8 - 4 3/4	5 1/16 - 4 15/16	5 3/8 - 5 1/8
French Franc	7 7/8 - 7 5/8	7 7/8 - 7 5/8	8 - 7 3/4	7 7/8 - 7 5/8	7 1/2 - 7 1/4	7 7/16 - 7 3/16
Portuguese Esc.	8 7/8 - 8 5/8	10 1/8 - 9 7/8	10 11/16 - 10 7/16	11 1/8 - 10 7/8	11 3/8 - 11 1/8	11 7/8 - 11 5/8
Spanish Peseta	8 3/4 - 8 1/2	8 13/16 - 8 11/16	9 1/8 - 9	9 11/16 - 9 9/16	10 1/16 - 9 13/16	10 11/16 - 10 7/16
Sterling	6 1/4 - 6 1/8	6 1/8 - 6	6 7/16 - 6 5/16	6 11/16 - 6 5/8	7 1/16 - 7	7 5/8 - 7 1/2
Swiss Franc	3 1/2 - 3 3/8	3 1/2 - 3 3/8	3 7/16 - 3 5/16	3 7/16 - 3 5/16	3 1/2 - 3 3/8	3 5/8 - 3 1/2
Can. Dollar	8 1/16 - 7 7/8	8 1/16 - 7 15/16	8 1/8 - 8	8 1/4 - 8 1/8	8 1/4 - 8 1/8	8 1/4 - 8 1/8
US Dollar	6 1/8 - 6	6 1/8 - 6	6 3/16 - 6 1/16	6 5/16 - 6 3/16	6 1/2 - 6 3/8	6 7/8 - 6 3/4
Italian Lira	10 1/2 - 9	10 3/8 - 10 1/8	10 7/16 - 10 5/16	11 3/16 - 11 1/16	11 9/16 - 11 7/16	11 15/16 - 11 13/16
Yen	2 - 1 13/16	1 13/16 - 1 7/8	1 7/8 - 1 13/16	1 13/16 - 1 3/4	1 13/16 - 1 3/4	1 13/16 - 1 3/4
Asian $Sing	3 7/8 - 3 3/4	3 1/4 - 3 1/8	2 13/16 - 2 11/16	2 15/16 - 2 13/16	3 - 2 7/8	3 3/8 - 3 1/4

Short term rates are call for the US Dollar and Yen, others: two days' notice.

■ **THREE MONTH PIBOR FUTURES** (MATIF) Paris interbank offered rate (FFr5m)

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	92.90	93.08	+0.16	93.13	92.81	35,801	47,345
Sep	93.28	93.40	+0.09	93.43	93.27	6,926	34,119
Dec	93.28	93.39	+0.06	93.43	93.26	4,413	21,957
Mar	93.20	93.28	+0.08	93.28	93.20	852	15,103

■ **THREE MONTH EURODOLLAR** (LIFFE)* $1m points of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun		93.55	+0.03			0	565
Sep		93.34	+0.07			0	329
Dec		93.10	+0.09			0	255
Mar		93.10	+0.09			0	0

■ **THREE MONTH EUROMARK FUTURES** (LIFFE)* DM1m points of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	95.32	95.27	-0.03	95.34	95.26	32684	167004
Sep	95.14	95.07	-0.03	95.17	95.06	40442	168657
Dec	94.84	94.79	-0.01	94.88	94.77	22988	118055
Mar	94.54	94.48	-0.01	94.57	94.47	11306	65949

■ **THREE MONTH EUROLIRA INT.RATE FUTURES** (LIFFE) L1000m points of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	88.28	88.58	+0.19	88.59	88.25	9157	41658
Sep	88.33	88.55	+0.16	88.58	88.33	1750	22145
Dec	88.35	88.56	+0.16	88.56	88.33	1049	12910
Mar	88.36	88.57	+0.17	88.57	88.36	294	7475

■ **THREE MONTH EURO SWISS FRANC FUTURES** (LIFFE) SFr1m points of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	96.63	96.59	-0.01	96.71	96.57	4675	22686
Sep	96.57	96.51	-0.02	96.62	96.50	2329	8289
Dec	96.44	96.35	-0.01	96.47	96.34	574	6223
Mar	96.29	96.20	-0.01	96.29	96.19	329	1747

■ **THREE MONTH ECU FUTURES** (LIFFE) Ecu1m points of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	93.24	93.31	+0.08	93.34	93.22	2080	6717
Sep	93.23	93.28	+0.06	93.29	93.23	972	4236
Dec	93.00	93.05	+0.05	93.08	93.00	400	2355
Mar	92.82	92.83	+0.04	92.86	92.79	31	1758

* LIFFE futures also traded on APT

CROSS RATES AND DERIVATIVES

EXCHANGE CROSS RATES

Apr 4		BFr	DKr	FFr	DM	I£	L	Fl	NKr	Es	Pta	SKr	SFr	£	C$	$	Y	Ecu
Belgium	(BFr)	100	19.25	17.01	4.863	2.186	6053	5.445	21.80	514.5	446.1	25.97	3.997	2.188	4.898	3.511	303.7	2.662
Denmark	(DKr)	51.98	10	8.839	2.527	1.136	3145	2.829	11.33	267.4	231.8	13.49	2.077	1.137	2.545	1.824	157.8	1.383
France	(FFr)	58.78	11.31	10	2.859	1.285	3558	3.201	12.81	302.5	262.2	15.26	2.350	1.286	2.879	2.064	178.5	1.565
Germany	(DM)	20.56	3.957	3.498	1	0.449	1245	1.120	4.482	105.8	91.72	5.340	0.822	0.450	1.007	0.722	62.44	0.547
Ireland	(I£)	45.76	8.808	7.784	2.225	1	2770	2.491	9.973	235.4	204.1	11.88	1.829	1.001	2.241	1.607	138.9	1.218
Italy	(L)	1.652	0.318	0.281	0.080	0.036	100.	0.090	0.360	8.500	7.369	0.429	0.066	0.036	0.081	0.058	5.016	0.044
Netherlands	(Fl)	18.36	3.534	3.124	0.893	0.401	1112	1	4.003	94.50	81.92	4.769	0.734	0.402	0.900	0.645	55.77	0.489
Norway	(NKr)	45.88	8.830	7.806	2.231	1.003	2777	2.498	10	236.1	204.7	11.91	1.834	1.004	2.247	1.611	139.3	1.222
Portugal	(Es)	19.43	3.740	3.306	0.945	0.425	1176	1.058	4.236	100.	86.69	5.047	0.777	0.425	0.952	0.682	59.01	0.517
Spain	(Pta)	22.42	4.314	3.814	1.090	0.490	1357	1.221	4.886	115.4	100.	5.821	0.896	0.490	1.098	0.787	68.07	0.597
Sweden	(SKr)	38.51	7.411	6.551	1.873	0.842	2331	2.097	8.393	198.1	171.8	10	1.539	0.842	1.886	1.352	116.9	1.025
Switzerland	(SFr)	25.02	4.815	4.256	1.217	0.547	1515	1.362	5.453	128.7	111.6	6.497	1	0.547	1.225	0.878	75.97	0.666
UK	(£)	45.71	8.797	7.776	2.223	0.999	2767	2.489	9.963	235.2	203.9	11.87	1.827	1	2.239	1.605	138.8	1.217
Canada	(C$)	20.42	3.929	3.473	0.993	0.446	1236	1.112	4.450	105.0	91.07	5.301	0.816	0.447	1	0.717	61.99	0.544
US	($)	28.48	5.481	4.845	1.385	0.622	1724	1.551	6.207	146.5	127.0	7.396	1.138	0.623	1.395	1	86.48	0.758
Japan	(Y)	32.93	6.338	5.602	1.602	0.720	1994	1.793	7.178	169.5	146.9	8.552	1.316	0.720	1.613	1.156	100.	0.877
Ecu		37.56	7.228	6.389	1.827	0.821	2274	2.045	8.187	193.3	167.5	9.753	1.501	0.822	1.840	1.319	114.1	1

Danish Kroner, French Franc, Norwegian Kroner, and Swedish Kronor per 10; Belgian Franc, Yen, Escudo, Lira and Peseta per 100.

■ **D-MARK FUTURES** (IMM) DM 125,000 per DM

	Open	Latest	Change	High	Low	Est. vol	Open int.
Jun	0.7312	0.7250	-0.0060	0.7355	0.7228	23,494	54,220
Sep	0.7285	0.7282	-0.0060	0.7287	0.7263	785	2,159
Dec	-	0.7306	-	-	0.7300	18	364

■ **JAPANESE YEN FUTURES** (IMM) Yen 12.5m per Yen 100

	Open	Latest	Change	High	Low	Est. vol	Open int.
Jun	1.1728	1.1678	-0.0054	1.1789	1.1649	24,816	57,861
Sep	1.1862	1.1820	-0.0056	1.1890	1.1800	187	2,591
Dec	1.1975	1.1965	-0.0054	1.1985	1.1975	47	165

■ **SWISS FRANC FUTURES** (IMM) SFr 125,000 per SFr

	Open	Latest	Change	High	Low	Est. vol	Open int.
Jun	0.8955	0.8844	-0.0117	0.9017	0.8825	13,804	27,875
Sep	0.8948	0.8907	-0.0106	0.8948	0.8900	56	2,479
Dec	-	0.8985	-	-	0.8980	39	185

■ **STERLING FUTURES** (IMM) £62,500 per £

	Open	Latest	Change	High	Low	Est. vol	Open int.
Jun	1.6164	1.6042	-0.0138	1.6180	1.6030	5,550	23,200
Sep	1.6110	1.6060	-0.0072	1.6110	1.6000	14	200
Dec	-	1.6000	-	-	1.5970	20	57

UK INTEREST RATES

LONDON MONEY RATES

Apr 4	Over-night	7 days notice	One month	Three months	Six months	One year
Interbank Sterling	6 1/4 - 3	6 3/16 - 5 15/16	6 5/16 - 6 1/8	6 3/4 - 6 5/8	7 1/8 - 6 15/16	7 13/16 - 7 5/8
Sterling CDs	-	-	6 3/16 - 6 1/8	6 5/8 - 6 1/2	7 - 6 15/16	7 5/8 - 7 1/2
Treasury Bills	-	-	6 1/16 - 6	6 1/4 - 6 1/8	-	-
Bank Bills	-	-	6 1/16 - 6	6 3/8 - 6 1/4	6 13/16 - 6 11/16	-
Local authority deps.	6 1/16 - 5 15/16	6 3/16 - 5 7/16	6 5/16 - 6 3/16	6 5/8 - 6 1/2	6 15/16 - 6 13/16	7 7/16 - 7 5/16
Discount Market deps	5 1/2 - 4 1/2	6 - 5 7/8	-	-	-	-

UK clearing bank base lending rate 6 3/4 per cent from February 2, 1995

	Up to 1 month	1-3 month	3-6 months	6-9 months	9-12 months
Certs of Tax dep. (£100,000)	3	5 1/4	5 1/4	6	6 1/4

Certs of Tax dep. under £100,000 is 2 1/2pc. Deposits withdrawn for cash 1 1/4pc.
Ave. tender rate of discount 6.1134pc. ECGD fixed rate Stg. Export Finance. Make up day Mar 31, 1995. Agreed rate for period Apr 26, 1995 to May 25, 1995, Schemes II & III 7.98pc. Reference rate for period Mar 1, 1995 to Mar 31, 1995, Schemes IV & V 6.713pc. Finance House Base Rate 7pc from Apr 1, 1995

■ **THREE MONTH STERLING FUTURES** (LIFFE) £500,000 points of 100%

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	92.78	92.80	+0.02	92.84	92.76	20898	95836
Sep	92.34	92.39	+0.03	92.43	92.34	12760	68217
Dec	91.98	92.04	+0.04	92.07	91.98	7010	55216
Mar	91.68	91.74	+0.05	91.76	91.68	2957	37843

Also traded on APT. All Open interest figs. are for previous day.

■ **SHORT STERLING OPTIONS** (LIFFE) £500,000 points of 100%

Strike Price	Calls Jun	Calls Sep	Calls Dec	Puts Jun	Puts Sep	Puts Dec
9250				0.18	0.57	0.81
9275	0.23	0.21	0.20	0.31	0.74	1.08
9300	0.11	0.13	0.12	0.49	0.93	1.28
9325	0.04	0.07	0.07			

Est. vol. total, Calls 8302 Puts 6217. Previous day's open int., Calls 174086 Puts 132802

EMS EUROPEAN CURRENCY UNIT RATES

Apr 4	Ecu cen. rates	Rate against Ecu	Change on day	% +/- from cen. rate	% spread v weakest	Div. ind.
Netherlands	2.15214	2.07304	+0.0011	-3.68	8.72	-
Belgium	39.3960	38.0604	+0.0048	-3.39	8.40	25
Germany	1.91007	1.85148	+0.00115	-3.07	8.04	-
Austria	13.4384	13.0300	+0.0077	-3.13	8.00	-
Portugal	195.792	195.804	-0.149	0.01	4.72	0
Denmark	7.28580	7.33362	+0.00557	0.66	4.04	-4
France	6.40608	6.48486	+0.01138	1.23	3.45	-10
Ireland	0.792214	0.828531	-0.002929	4.58	0.13	-31
Spain	162.493	170.167	-0.343	4.72	0.00	-33
NON ERM MEMBERS						
Greece	292.867	302.810	+0.127	3.40	1.28	-
Italy	2106.15	2305.45	-8.74	9.46	-4.33	-
UK	0.786652	0.829857	-0.002261	5.49	-0.73	-

Ecu central rates set by the European Commission. Currencies are in descending relative strength. Percentage changes are for Ecu; a positive change denotes a weak currency. Divergence shows the ratio between two spreads: the percentage difference between the actual market and Ecu central rates for a currency, and the maximum permitted percentage deviation of the currency's market rate from its Ecu central rate.
(17/9/92) Sterling and Italian Lira suspended from ERM. Adjustment calculated by the Financial Times.

■ **PHILADELPHIA SE £/$ OPTIONS** £31,250 (cents per pound)

Strike Price	Calls Apr	Calls May	Calls Jun	Puts Apr	Puts May	Puts Jun
1.525	9.07	9.31	9.82	-	0.29	0.74
1.550	6.69	7.22	7.73	0.04	0.63	1.25
1.575	4.42	5.30	5.96	0.26	1.20	1.96
1.600	2.53	3.67	4.47	0.82	2.05	2.87
1.625	1.17	2.46	3.22	1.95	3.20	4.09
1.650	0.44	1.51	2.29	3.66	4.75	5.58

Previous day's vol., Calls 3,603 Puts 5,385. Prev. day's open int., Calls 225,963 Puts 305,659

■ **THREE MONTH EURODOLLAR** (IMM) $1m points of 100%

	Open	Latest	Change	High	Low	Est. vol	Open int.
Jun	93.52	93.55	+0.03	93.56	93.52	87,276	522,411
Sep	93.28	93.34	+0.06	93.35	93.26	129,898	349,837
Dec	93.03	93.10	+0.07	93.11	93.01	86,370	267,177

■ **US TREASURY BILL FUTURES** (IMM) $1m per 100%

	Open	Latest	Change	High	Low	Est. vol	Open int.
Jun	94.10	94.10	+0.03	94.11	94.09	606	15,649
Sep	93.85	93.85	+0.04	93.85	93.85	281	10,228
Dec	93.63	93.64	+0.05	93.64	93.62	99	9,256

All Open interest figs. are for previous day

■ **EUROMARK OPTIONS** (LIFFE) DM1m points of 100%

Strike Price	Calls Apr	Calls May	Calls Jun	Calls Sep	Puts Apr	Puts May	Puts Jun	Puts Sep
9525	0.05	0.16	0.14	0.18	0.04	0.08	0.12	0.34
9550	0.01	0.02	0.04	0.06	0.24	0.25	0.27	0.51
9575	0	0	0.01	0.03	0.48	0.48	0.49	0.71

Est. vol. total, Calls 12645 Puts 16758. Previous day's open int., Calls 144666 Puts 230744

■ **EURO SWISS FRANC OPTIONS** (LIFFE) SFr 1m points of 100%

Strike Price	Calls Jun	Calls Sep	Calls Dec	Puts Jun	Puts Sep	Puts Dec
9650	0.15	0.20	0.21	0.06	0.19	0.38
9675	0.04	0.09	0.12	0.20	0.33	0.52
9700	0.01	0.03	0.06	0.42	0.52	0.71

Est. vol. total, Calls 3 Puts 0. Previous day's open int., Calls 850 Puts 885

BASE LENDING RATES

	%		%		%
Adam & Company	6.75	Duncan Lawrie	6.75	*Roxburghe Guarantee Corporation Limited is no longer authorised as a banking institution.	10
Allied Trust Bank	6.75	Exeter Bank Limited	7.75	Royal Bk of Scotland	6.75
AIB Bank	6.75	Financial & Gen Bank	7.50	Singer & Friedlander	6.75
●Henry Ansbacher	6.75	●Robert Fleming & Co	6.75	●Smith & Williamson Secs.	6.75
Bank of Baroda	6.75	Girobank	6.75	TSB	6.75
Banco Bilbao Vizcaya	6.75	●Guinness Mahon	6.75	●United Bk of Kuwait	6.75
Bank of Cyprus	6.75	Habib Bank AG Zurich	6.75	Unity Trust Bank Plc	6.75
Bank of Ireland	6.75	●Hambros Bank	6.75	Western Trust	6.75
Bank of India	6.75	Heritable & Gen Inv Bk	6.75	Whiteaway Laidlaw	6.75
Bank of Scotland	6.75	●Hill Samuel	6.75	Yorkshire Bank	6.75
Barclays Bank	6.75	C. Hoare & Co	6.75		
Brit Bk of Mid East	6.75	Hongkong & Shanghai	6.75		
●Brown Shipley & Co Ltd	6.75	Julian Hodge Bank	6.75		
Citibank NA	6.75	●Leopold Joseph & Sons	6.75	● Members of London Investment Banking Association	
Clydesdale Bank	6.75	Lloyds Bank	6.75	* In administration	
The Co-operative Bank	6.75	Meghraj Bank Ltd	6.75		
Coutts & Co	6.75	Midland Bank	6.75		
Credit Lyonnais	6.75	* Mount Banking	6.75		
Cyprus Popular Bank	6.75	NatWestminster	6.75		
		●Rea Brothers	6.75		

LONDON SHARE SERVICE

BANKS, MERCHANT

	Notes	Price	+ or –	1995 high	1995 low	Mkt Cap£m	Yld Gr's	P/E
Barings 8pc Cu 2nd Pf		[illegible]	—	98	50¼	[illegible]	19.8	–
9¼pc Non-Cum Pf		[illegible]	—	118½	3	1.90	–	–
Cater Allen	‡†□	459	—	465	418	149.6	7.7	9.5
Close Bros	‡†□	281xd	+1	281	219	248.5	3.8	11.8
Gerrard & Nat	‡†□	415	—	480	395	202.1	7.2	12.0
Hambros	□	218	+2	253	195	385.0	8.6	13.4
7½pc Cv Pf		98	+½	112	94	128.2	9.6	–
Joseph (L)	‡†	378	–5	408	378	20.0	5.8	11.0
King & Shaxson	‡	91	—	103	86	15.8	12.4	9.0
Kleinwort Benson	‡q□	644xd	+17	680	529	868.7	4.2	12.5
Rea Bros	‡□	58	—	67	58	24.1	2.2	Φ
Schroders	‡q□	1520xd	—	1548	1360	1,588	1.7	14.9
N/V	□	1345xd	—	1393	1235	380.1	1.9	12.3
Singer & Fried	‡□	82	—	86½	82	159.3	5.5	Φ
Union	‡□	87xd	—	93	70	23.1	4.3	Φ
Warburg (SG)	‡□	713	+8	784	655	1,569	3.9	13.1
Wintrust	‡†	205	–5	236	200	17.4	6.5	13.7

BANKS, RETAIL

	Notes	Price	+ or –	1995 high	1995 low	Mkt Cap£m	Yld Gr's	P/E
ABN Amro Fl	□	£22½	—	£23½	£21½	8,957	5.6	Φ
ANZ A$		217	–2	233	198	2,837	5.3	7.9
Abbey National	q□	479xd	+7	479½	413	6,288	4.8	10.3
Allied Irish I£	‡□	273xd	+3	278	250	1,819	5.2	10.5
Anglo Irish I£	□	49	—	56	48	168.6	9.0	9.9
Asahi Y	□	685¼	+13½	774¼	632¼	16,142	0.7	–
Banco Bil Viz Pta	□	£16½	+½	£17½	£14½	3,688	5.1	7.3
Banco Sant Pta		£24½	—	£24½	£23½	3,688	5.2	Φ
Bk Ireland I£	†□	314	+1	318	288	1,498	4.6	9.1
Bank Scotland	‡†□	222	+7	224	191½	2,588	3.0	12.5
9¼pc Pf		117¼	+1¼	128	115¾	117.2	9.9	–
9¾pc Pf		123¼	+1½	125¼	112¼	123.2	9.9	–
Barclays	‡q□	632xd	+8	633	557½	10,338	4.2	9.3
Dai Ichi Kan Y	□	£11½	+¼	£12¼	[illegible]	35,743	0.5	–
Deutsche DM	□	£300½	+4½	£317½	£285½	14,240	2.5	–
Espirito Santo	□	68½	+½	69½	58½	139.9	12.4	Φ
Fuji Bank Y	□	1282½	+62½	1465	1182½	37,153	0.5	–
HSBC Hk	q□	707xd	+20	721½	576	12,400	4.8	8.9
HSBC (75p Shs)	q□	717xd	+17	734	589	6,108	4.7	9.0

BREWERIES

BUILDING & CONSTRUCTION

BUILDING MATS. & MERCHANTS

BUILDING MATS. & MERCHANTS - Cont.

CHEMICALS

DISTRIBUTORS

DIVERSIFIED INDUSTRIALS

ELECTRICITY

ELECTRONIC & ELECTRICAL EQPT

ELECTRONIC & ELECTRICAL EQPT - Cont.

ENGINEERING

ENGINEERING, VEHICLES

EXTRACTIVE INDUSTRIES

FOOD PRODUCERS

GAS DISTRIBUTION

HEALTH CARE

HEALTH CARE - Cont.

HOUSEHOLD GOODS

INSURANCE

INVESTMENT TRUSTS

INVESTMENT TRUSTS - Cont.

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LONDON SHARE SERVICE

INV TRUSTS SPLIT CAPITAL

INVESTMENT COMPANIES - Cont.

OIL EXPLORATION & PRODUCTION - Cont.

PROPERTY

RETAILERS, GENERAL - Cont.

TRANSPORT - Cont.

LEISURE & HOTELS

SPIRITS, WINES & CIDERS

SUPPORT SERVICES

WATER

OIL, INTEGRATED

AMERICANS

OTHER FINANCIAL

LIFE ASSURANCE

CANADIANS

MEDIA

OTHER SERVICES & BUSINESSES

TELECOMMUNICATIONS

SOUTH AFRICANS

	Notes	Price	+ or -	1995 high	low	Mkt Cap£m	Yld Gr's	P/E
Anglo Am Ind		£32½	.....	£34	£29	2,124	2.4	Φ
Barlow	♣	25¼	+⅛	£5⅞	£4⅞	1,247	1.6	22.9
Gold Flds Prop R		144xa	.....	152	118	14.7	7.2	Φ
MK Props		90	.....	95	85	3.82	12.9	-
SASOL	♥	590	+18	600	435	3,495	2.3	-
SA Brews	†	£17¾	+½	£17¾	£12¾	4,954	1.6	28.5
Tiger Oats		850	.....	875	700	1,278	1.7	20.6
Tongaat-Hulett	†n	672	.....	*762	636	612.5	2.1	20.2

GUIDE TO LONDON SHARE SERVICE

Prices for the London Share Service delivered by Extel Financial, a member of the Financial Times Group.

Company classifications are based on those used for the FT-SE Actuaries Share Indices.

Closing mid-prices are shown in pence unless otherwise stated. Highs and lows are based on intra-day mid- prices.

Where stocks are denominated in currencies other than sterling, this is indicated after the name.

Symbols referring to dividend status appear in the notes column daily as a guide to yields and P/E ratios. Dividends and Dividend covers are published on Monday.

Market capitalisation shown is calculated separately for each line of stock quoted.

Estimated price/earnings ratios are based on latest annual reports and accounts and, where possible, are updated on interim figures. P/Es are calculated on "net" distribution basis, earnings per share being computed on profit after taxation, excluding exceptional profits/losses and unrelieved ACT where applicable. Yields are based on mid-prices, are gross, adjusted for a dividend tax credit of 20 per cent and allow for value of declared distribution and rights.

Estimated Net Asset Values (NAVs) are shown for Investment Trusts, in pence per share, along with the percentage discounts (Dis) or premiums (Pm -) to the current closing share price. The NAV basis assumes prior charges at par value, convertibles converted and warrants exercised if dilution occurs.

- □ Indicates the most actively traded stocks. This includes UK stocks where transactions and prices are published continuously through the Stock Exchange Automated Quotation system (SEAQ) and non-UK stocks through the SEAQ International system.
- • Highs and lows marked thus have been adjusted to allow for capital changes
- † Interim since increased or resumed
- ‡ Interim since reduced, passed or deferred
- Φ Figures or report awaited
- ♥ Rule 2.1(a)(iv) Overseas incorporated companies listed on an approved exchange.
- ♣ Free annual/interim report available, see details below.
- ♣ USM; not listed on Stock Exchange and company not subjected to same degree of regulation as listed securities.
- ‡‡ Rule 4.2(a) Irish incorporated non-listed companies.
- ‖ Price at time of suspension
- ¶ Indicated dividend yield after pending scrip and/or rights issue.
- ♦ Merger bid or reorganisation in progress
- § Forecast dividend yield; p/e based on earnings updated by latest interim statement.
- ♠ Unregulated collective investment scheme.

a Yield based on annualised dividend
b Figures based on prospectus or other official estimates.
g Assumed dividend yield after rights issue.
h Assumed dividend yield after scrip issue.
n Rights issue pending
q Earnings based on preliminary figures.
s Dividend yield excludes a special payment.
t Indicated dividend yield, p/e ratio based on latest annual earnings.
u Forecast, or estimated annualised dividend yield, p/e based on previous year's earnings
v P/e ratios are calculated under new ACT guidelines.
z Dividend yield includes a special payment
F Yield based on prospectus or other official estimates for 1994-95.
G Assumed yield after pending scrip and/or rights issue.
H Yield based on prospectus or other official estimates for 1995.
K Yield based on prospectus or other official estimates for 1994
L Estimated annualised yield, p/e based on latest annual earnings.
M Yield based on prospectus or other official estimates for 1995-96.
R Forecast annualise yield, p/e based on prospectus or other official estimates.
W Pro forma figures.
Z Dividend yield to date.

Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xl ex capital distribution.

This service is available to companies whose shares are regularly traded in the United Kingdom for a fee of £1275 a year for each security shown, subject to the Editor's discretion

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FT Cityline

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An international service is available for callers outside the UK, annual subscription £250 stg.

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BERMUDA (SIB RECOGNISED)

GUERNSEY (SIB RECOGNISED)

GUERNSEY (REGULATED)(**)

IRELAND (SIB RECOGNISED)

IRELAND (REGULATED)(**)

JERSEY (SIB RECOGNISED)

ISLE OF MAN (SIB RECOGNISED)

ISLE OF MAN (REGULATED)(**)

LUXEMBOURG (SIB RECOGNISED)

JERSEY (REGULATED)(**)

LUXEMBOURG (REGULATED)(**)

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OFFSHORE INSURANCES

LONDON STOCK EXCHANGE

MARKET REPORT

Futures lead the FT-SE 100 to a new 1995 peak

By Terry Byland, UK Stock Market Editor

The UK stock market burst through to new 1995 peaks yesterday as strength in bond and stock index futures ignited equities, and caught marketmakers on the wrong foot. With the US dollar in better shape and European bond markets sharply higher, the FT-SE 100 Share Index closed 45 points ahead at 3,188.1, a shade under the day's best, with the June future on the 100 Index showing a strong premium.

Rumours at mid-session that the European central banks planned a meeting to discuss the US dollar buttressed the blue chip international stocks, which were led ahead by US buying of pharmaceuticals stocks. At the London close, the Dow Jones Industrial Average was more than 12 points up.

Base rate worries seemed to have been put aside, with few analysts expecting any immediate results from today's meeting between Mr Kenneth Clarke, the UK chancellor of the exchequer, and Mr Eddie George, governor of the Bank of England. But interest rate concerns remained a factor as sterling came under pressure in advance of tomorrow's local elections in Scotland where Mr John Major's Conservative administration is expected to fare badly. Equities moved ahead from the opening but the driving force came from stock index futures. The June Footsie contract quickly moved above 3,200, holding this territory for the rest of the day.

Among the blue chips, British Petroleum, Glaxo, HSBC and Reuters stood out strongly. Investors were somewhat more selective when it came to the domestic retail issues, although "quality stocks" took their share of the increased investment demand.

Marketmakers had kept trading books even, over the period covering the end of the first quarter of the year and also the end of the 1994-1995 tax year. They were quickly "taken out" by the unexpected wave of buyers and faced with the need to compete in the market for shares, a factor which could only mean further upward pressures.

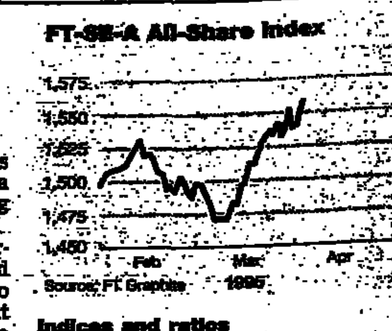
There was little opportunity for marketmakers to buy stock cheaply yesterday afternoon and further pressure is likely today.

The pace quickened when opportunities were taken to bring forward corporate deals which had probably been waiting in the wings. Lloyds Bank sold its 4.5 per cent stake in Standard Chartered and the Abu Dhabi Investment Authority sold most of its stake in T&N, the UK engineering group. Excitement gathered pace in late dealings when some sources claimed that a "very large takeover bid" was being prepared.

The focus on the market's international stocks left the FT-SE Mid 250 Index somewhat trailing to show a closing gain of 22.2 points at 3,459.8. The FT-SE-350 gained 19.6 to a 1995 peak of 1,580.2.

But non-Footsie business remained high, making up around 62 per cent of the day's Seaq total of 779.5m shares. Trading volume contrasted sharply with the dismal levels of the previous session when Seaq recorded fewer than 500m shares, with retail business worth £1.32bn.

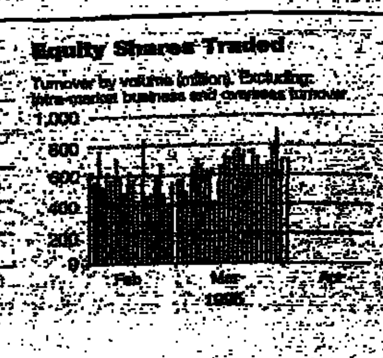
FT-SE-A All-Share Index



Source: FT Graphite

Equity Shares Traded

Turnover by volume (million). Excluding: intra-market business and overseas turnover



Indices and ratios

FT-SE 100	3188.1	+45.0
FT-SE Mid 250	3459.8	+22.2
FT-SE-A 350	1580.2	+19.6
FT-SE-A All-Share	1558.90	+18.29
FT-SE-A All-Share yield	4.10	(4.10)
FT Ordinary Index	2441.8	+33.3
FT-SE-A Non Fins p/e	17.19	(16.99)
FT-SE 100 Fut Jun	3211.0	+42.0
10 yr Gilt yield	8.45	(8.48)
Long gilt/equity yld ratio:	2.09	(2.08)

Best performing sectors

1. Gas Distribution ...... +3.2
2. Pharmaceuticals ...... +2.5
3. Life Assurance ...... +1.7
4. Extractive Inds. ...... +1.6
5. Media ...... +1.6

Worst performing sectors

1. Property ...... -0.1
2. Other Ser. & Bus. ...... +0.0
3. Other Financial ...... +0.2
4. Building Mats ...... +0.3
5. Textiles & Apparel ...... +0.4

Hanson hint for Gas

The wave of bid speculation washing over the market was partly focused on British Gas whose shares jumped over 3 per cent, leaving them the fourth-best performers in the FT-SE 100. At the close, Gas shares were 9¼ higher at 286p after heavy turnover of 16m – the third highest daily figure this year.

Inevitably the talk around the marketplace was that Hanson was preparing to launch its long-expected mega-bid with Gas as its target.

The immediate response from analysts was that, with market capitalisation well in excess of £12bn, Gas might be too big to swallow, even for Hanson.

Others suggested, however, that Hanson might be acting in concert with another predator. Hanson is believed to be determined to acquire businesses generating non-cyclical UK earnings.

With the Recs seemingly put out of reach by the electricity regulator's bombshell last month and the water sector regarded as too delicate politically, Gas could provide the answer for Hanson, specialists said.

"Gas is still inefficient and if there are big cost savings to be uncovered, then Hanson would find them," said one analyst.

Shares in BP delivered another powerful performance yesterday, moving ahead to touch a new all-time peak of 437p. Sector specialists said there were many reasons for the stock's continuing strength, notably its favour among investors on Wall Street which has been hitting successive record highs on the Dow Average in recent trading sessions.

"Basically, the US still loves the stock," said one analyst pointing to large-scale switching out of Shell and into BP in recent weeks.

He added that if BP management is close to achieving its target levels of net income of $3bn for 1996 – a target set using an average oil price of $16 a barrel – then the shares still look cheap as oil prices approach $18 a barrel. At the close, the shares eased from the day's best to close a net 5½ higher at 436½p.

Shell shares were by no means left behind, however, and moved up 12 to 722p on good turnover of 5.7m. Shell reached an all-time high of 758p last September.

Standard placing

One of the market's longest standing shareholdings – Lloyds Bank's 4.54 per cent stake in Standard Chartered – was finally dissolved yesterday as Lloyds sold the shares to its broker Hoare Govett who placed the stock in the market.

In an exceptionally finely-judged piece of broking, Hoare bought the shares from Lloyds at 290p and sold them at 292½p, netting the broker in excess of £1m.

Hoare Govett said the shares were distributed with a large number of institutions. The placing, described as "hard work" by Hoare Govett, was completed very quickly and efficiently, according to marketmakers at other leading UK houses.

Lloyds acquired most of its holding in 1986 when it launched an ultimately unsuccessful bid for Standard. It topped up the stake to the 4.54 per cent level following a Standard rights issue in 1988.

Tan Sri Khoo Teck Puat, the Malaysian businessman, retains a near 15 per cent stake in Standard, the last remaining holding arising from the 1986 failed Lloyds bid.

Standard shares were trading at 303p when the placing got underway, subsequently easing back to close a net 5 off at 294p.

The placing of the 43.8m shares accounted for virtually all of yesterday 88m turnover in the shares. Lloyds Bank shares rose 8 to 622p.

In the drinks sector, Highland Distilleries, the whisky producer which reported figures below expectations on Monday, lost another 20 to 337p as brokers' profit downgrades continued to exact a toll. NatWest Securities downgraded its recommendation from "add" to "hold" and UBS reiterated its "sell" advice.

Guinness was in demand and the shares advanced 7 to 462p, in trade of 3m, after ABN-Amro Hoare Govett reiterated its buy recommendation.

Mrs Julie Bower at the broker said: "The international spirits market is turning; 1994 was the worst year and things will look better in 1995. Also the outlook on pricing is improving."

However, UBS takes the opposite view and it remains a seller of the shares. The securities house cited the "unexciting" medium term outlook for the whisky market, particularly mature markets such as the US. The market trend boosted other stocks in the sector. Bass hardened 4 to 557p, while Greenalls Group put on 6 to 444p. Dealers reported a shortage of stock in Allied Domecq. The shares gained 6 to 544p.

Pharmaceuticals stocks responded to strong renewed support in the US on Monday night following profit-taking over the past week. They were helped by a rebound in the dollar against sterling.

Specifically, there was support for SmithKline Beecham which rose 18 to 501p in the 'A's.

Goldman Sachs reiterated its positive stance ahead of first-quarter figures on April 20. And Glaxo, which lifted 16 to 727p, received further help from Monday's news that it had received preliminary US approval for the tablet form of its migraine drug. Zeneca gained 13 to 888p.

Bus company shares advanced on news of an industry merger and hopes of further corporate action. Badgerline lifted 5 to 138p as it announced that it is joining forces with GRT to form FirstBus. GRT shares rose 13 to 269p but the real beneficiary was Go-Ahead, which jumped 15 to 191p. Analysts said Go-Ahead margins had been improving at a slower pace than those of its rivals and was ripe for takeover. Stagecoach, the leader in the field, was unchanged at 212p.

British Airways fell 3½ to 403p. Air traffic statistics for March are due today and will be skewed by the late arrival of Easter, always a prime business period for spring break travel. However, analysts said heavy selling by one leading UK securities house had played a more significant part.

Specialist banknote group De La Rue added 18 at 891p as Henderson Crosthwaite, which has been a seller of the stock, argued that it had fallen too far and was looking attractive.

Marketing services group WPP jumped 6 to 107p with Panmure Gordon recommending the stock.

Among retailers, Storehouse jumped 12 to 241p, in trade of 4m with Cazenove said to have been recommending the shares. Talk of a share buy back at Next helped the shares appreciate 12 to 306p on volume of 4.6m.

Talk that Land Securities will reveal a decline in net asset value and modest dividend growth when it reports figures in May saw the shares fall 2 to 590p.

A squeeze sent Rolls-Royce 7 ahead to 169p, the day's best performance in the FT-SE 100 Index. Volume stood at 6.4m at the close.

FINANCIAL TIMES EQUITY INDICES

	Apr 4	Apr 3	Mar 31	Mar 30	Mar 29	Yr ago	*High	*Low
Ordinary Share	2441.8	2408.5	2407.4	2433.6	2405.9	2474.9	2441.8	2238.3
Ord. div. yield	4.33	4.39	4.40	4.35	4.39	3.76	4.66	4.33
P/E ratio net	16.80	16.57	16.80	16.84	16.68	21.17	18.04	16.57
P/E ratio nil	16.71	16.48	16.48	16.66	16.48	22.07	17.28	15.77

*For 1995. Ordinary Share index since compilation: high 2713.6 2/02/94; low 49.4 26/6/40
FT Ordinary Share index base date 1/7/35.

Ordinary Share hourly changes

Open	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	High	Low
2415.8	2425.7	2426.8	2436.4	2435.7	2442.8	2442.4	2440.9	2440.9	2443.2	2415.8

	Apr 4	Apr 3	Mar 31	Mar 30	Mar 29	Yr ago
SEAQ bargains	47,692	37,309	38,176	40,088	34,820	28,012
Equity turnover (£m)†	-	1323.0	1491.5	2185.6	1831.5	1657.3
Equity bargains†	-	57,948	49,095	58,212	48,600	34,840
Shares traded (ml)†	-	696.1	680.4	923.0	796.8	713.9

†Excluding intra-market business and overseas turnover.

■ London market data

Rises and falls*		1995 Highs and lows		LIFFE Equity options	
Total Rises	1,046	Total Highs	187	Total contracts	32,011
Total Falls	289	Total Lows	90	Calls	17,311
Same	1,532			Puts	14,700

April 4 *Data based on Equity shares listed on the London Share Service.

FUTURES AND OPTIONS

■ FT-SE 100 INDEX FUTURES (LIFFE) £25 per full index point (APT)

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	3180.0	3211.0	+42.0	3221.0	3180.0	13136	55616
Sep	3240.0	3235.0	+42.0	3240.0	3240.0	5	1511
Dec		3264.0	+41.0			0	0

■ FT-SE MID 250 INDEX FUTURES (LIFFE) £10 per full index point

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	3475.0	3475.0	+20.0	3475.0	3475.0	8	4892

■ FT-SE 100 INDEX OPTION (LIFFE) (*3188) £10 per full index point

	3000 C	3000 P	3050 C	3050 P	3100 C	3100 P	3150 C	3150 P	3200 C
Apr	198½	2	152½	4	108	9½	69½	20	38
May	214½	9	172	16	132	26	98	40½	67
Jun	227	19	186	27½	150	41½	117½	58	86½
Jul	247½	30½	211	43½	174½	57	144½	76½	115
Dec†	316	89			252	102½			192

Calls 4,937 Puts 7,386

■ EURO STYLE FT-SE 100 INDEX OPTION (LIFFE) £10 per full index point

	3025 C	3025 P	3075 C	3075 P	3125 C	3125 P	3175 C	3175 P
Apr	175½	3½	128½	6	87	14½	52	29
May	193	12½	151½	20½	113½	32½	80½	49
Jun	208½	25½	170	36	135	50	103½	68
Sep	258	54½			189½	82½		
Dec†	303½	75½			239½	106		

Calls 2,237 Puts 3,614 * Underlying index value. Premiums shown are based on settlement prices.
† Long dated expiry months.

LONDON RECENT ISSUES: EQUITIES

Issue price p	Amt paid up	Mkt. cap (£m.)	1995 High	1995 Low	Stock	Close price p	+/-	Net div.	Div. cov.	Grs yld	P/E net
150	F.P.	516.7	167	154	Albright & Wilson	164½	+½	R6.0	1.5	4.6	18.2
-	F.P.	17.5	201	170	Beale	171	-5	H5.9	-	4.3	-
-	F.P.	3.61	123	113	Brit Aerospace Uts	123		-	-	-	-
-	F.P.	34.0	161	123	Colleagues	150	-11	-	-	-	-
§125	F.P.	15.5	135	130	Dailywin	130		Rv6.0	2.2	5.8	8.8
§130	F.P.	45.7	138	136	Datrontech	136		-	-	-	15.6
175	F.P.	102.7	178	170½	Expro Intl	174		Wv6.0	3.3	4.3	13.0
100	F.P.	29.9	101	99½	Geared Inc Inv C	99½		-	-	-	-
§135	F.P.	15.4	138	115	Golden Rose	115	-1	-	-	-	-
100	F.P.	163.2	102	95	HTR Inc Gth Sp Inc	102	+1	-	-	-	-
100	F.P.	94.5	105	102	Do. Zero Div Pf	105		-	-	-	-
-	F.P.	8.91	20	17	Inv Cap Warrants	18		-	-	-	-
-	F.P.	21.8	87	83	Inv Tst of Inv Tsts	84		-	-	-	-
-	F.P.	2.81	59	55	Do. Warrants	56		-	-	-	-
-	F.P.	0.35	5	3	Melrose Warrants	3½		-	-	-	-
100	F.P.	23.8	96	90	Montanaro UK Sm	95		-	-	-	-
-	F.P.	2.20	48	43	Do. Warrants	44	+1	-	-	-	-
475	170	6,102.3	193	158½	*Natl Power (P/P)	170	+5½	F15.45	2.8	4.1	13.1
90	F.P.	17.5	92	90	PTS	92		L3.8	1.9	4.9	13.3
512	185	4,050.6	206	178½	*PowerGen (P/P)	189	+5½	F15.0	3.2	3.6	11.1
-	F.P.	81.8	517	493	Schroder I G Uts	517	+1	-	-	-	-
100	F.P.	22.6	97	95	Scott Or Smlr Cos	95½		-	-	-	-
-	F.P.	1.99	42	39	Do. Warrants	42	+1	-	-	-	-
50	F.P.	3.10	52	40	Superframe	40	-2	Rv2.0	1.6	6.2	9.9
-	F.P.	0.04	1600	6	Do. Warrants	6		-	-	-	-
-	F.P.	24.5	103	100	Throg Dl Zero Pf	103		-	-	-	-
145	F.P.	62.7	183	170	Zotefoams	173		Wv4.65	2.1	3.4	17.5

* Note: Issue price 10p higher for institutional and overseas investors.

FT GOLD MINES INDEX

	Apr 3	% chg on day	Mar 31	Mar 30	Year ago	Gross div yield %	52 week High	52 week Low
Gold Mines Index (34)	1984.14	+1.8	1929.82	1985.85	2895.44	2.16	2237.90	1837.91
■ Regional Indices								
Africa (16)	2819.37	+3.3	2728.86	2587.60	2854.96	4.84	3711.87	2304.45
Australasia (7)	2228.29	+5.5	2112.78	1992.85	2426.44	1.88	2951.49	1788.20
North America (11)	1679.50	+0.3	1675.16	1649.86	1800.16	0.78	1911.21	1348.18

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Figures in brackets show number of companies. Basis US Dollars. Base Values: 1000.00 31/12/92.
Latest prices were unavailable for this edition.

FT-SE Actuaries Share Indices — The UK Series

	Apr 4	Day's chge%	Apr 3	Mar 31	Mar 30	Year ago	Div. yield%	Net cover	P/E ratio	Xd adj. ytd	Total Return
FT-SE 100	3188.1	+1.4	3143.1	3137.9	3176.2	3116.2	4.28	1.89	15.48	47.99	1236.26
FT-SE Mid 250	3459.8	+0.6	3437.6	3434.7	3438.6	3763.0	3.72	1.84	18.26	31.38	1315.59
FT-SE Mid 250 ex Inv Trusts	3469.7	+0.6	3449.3	3445.5	3446.0	3785.5	3.86	1.90	17.01	31.90	1317.64
FT-SE-A 350	1580.2	+1.3	1560.6	1556.4	1573.5	1583.0	4.15	1.88	16.02	21.68	1262.17
FT-SE-A 350 Higher Yield	1594.4	+1.3	1574.1	1570.4	1588.4	1591.2	5.10	1.70	14.38	28.27	1042.46
FT-SE-A 350 Lower Yield	1565.8	+1.2	1547.0	1548.3	1559.2	1534.2	3.04	2.22	18.49	14.81	1042.29
FT-SE SmallCap	1721.92	+0.4	1715.60	1717.03	1715.66	1903.70	3.51	1.53	23.28	16.31	1358.63

■ FT-SE Actuaries All-Share

TRADING VOLUME

■ Major Stocks Yesterday

■ Hourly movements

■ FT-SE Actuaries 350 Industry baskets

WORLD STOCK MARKETS

EUROPE

AUSTRIA (Apr 4 / Sch)

BELGIUM/LUXEMBOURG (Apr 4 / Frs.)

CZECH REP (Apr 4 / Korunas)

DENMARK (Apr 4 / Kr)

FINLAND (Apr 4 / Mka)

FRANCE (Apr 4 / Frs.)

GERMANY (Apr 4 / Dm.)

GREECE (Apr 4 / Drachma)

ITALY (Apr 4 / Lira)

NETHERLANDS (Apr 4 / Fls.)

NORWAY (Apr 4 / Kroner)

POLAND (Apr 3 / Zloty)

PORTUGAL (Apr 4 / Escudo)

SPAIN (Apr 4 / Pts.)

SWEDEN (Apr 4 / Kronor)

SWITZERLAND (Apr 4 / Frs.)

TURKEY (Apr 4 / Tk Lira)

PACIFIC

JAPAN (Apr 4 / Yen)

HONG KONG (Apr 4 / H.K.$)

INDONESIA (Apr 4 / Rupiah)

MALAYSIA (Apr 4 / MYR)

NEW ZEALAND (Apr 4 / NZ $)

SINGAPORE (Apr 4 / S$)

AUSTRALIA (Apr 4 / Aust$)

SOUTH KOREA (Apr 4 / Won)

TAIWAN (Apr 1 / TW $)

THAILAND (Apr 4 / Baht)

AFRICA

SOUTH AFRICA (Apr 4 / Rand)

NORTH AMERICA

CANADA

TORONTO (Apr 4 / Can $) 4 pm close

MONTREAL (Apr 4 / Can $) 4 pm close

INDICES

	Apr 4	Apr 3	Mar 31	1995 High	1995 Low
Argentina					
General (29/12/77)	(u)	13765.38	13958.11	16531.70 2/1	9831.09 9/3
Australia					
All Ordinaries(1/1/80)	1936.3	1899.5	1906.6	1936.30 4/4	1823.30 8/2
All Mining(1/1/80)	876.3	850.5	839.0	827.30 2/1	795.30 8/2
Austria					
Credit Aktien(30/12/84)	356.47	354.65	352.13	385.42 2/1	350.32 30/3
Traded Index(2/1/91)	952.87	945.43	937.90	1058.31 2/1	934.83 30/3
Belgium					
BEL20 (1/1/91)	1325.84	1308.70	1300.44	1391.22 6/1	1271.59 9/3
Brazil					
Bovespa (29/12/83)	(u)	29035.0	29790.0	43190.00 2/1	21382.00 9/3
Canada					
Metals Minls♦(1975)	(u)	4112.48	4152.24	4326.07 18/1	3886.83 1/3
Composite♦ (1975)	(u)	4277.20	4313.60	4319.48 30/3	3991.41 30/1
Portfolio$$ (4/1/83)	(u)	2111.87	2127.91	2142.81 24/3	1948.38 31/1
Chile					
IPGA Gen (31/12/80)	(u)	5254.7	5276.5	5616.21 17/1	4578.80 9/3
Denmark					
CopenhagenSE(3/1/83)	336.40	333.58	332.09	357.07 13/2	330.01 29/3
Finland					
HEX General(28/12/90)	1659.5	1613.2	1595.3	1940.30 10/1	1595.30 29/3
France					
SBF 250 (31/12/90)	1235.93	1225.19	1223.30	1281.23 5/1	1158.14 10/3
CAC 40(31/12/87)	1882.77	1864.00	1859.48	1901.79 4/1	1721.80 13/3
Germany					
FAZ Aktien(31/12/58)	726.22	714.48	715.61	795.81 16/2	708.87 30/3
Commerzbank(1/12/53)	2071.1	2036.7	2039.3	2269.00 16/2	2018.70 30/3
DAX (30/12/87)‡	1985.01	1930.82	1922.59	2135.04 15/2	1910.86 28/3
Greece					
Athens SE(31/12/80)	820.80	828.23	824.60	986.22 4/1	787.18 16/3
Hong Kong					
Hang Seng(31/7/64)	8491.93	8400.44	8587.72	8827.93 28/3	6967.93 23/1
India					
BSE Sens.(1979)	3385.48	3314.31	3260.98	3932.09 2/1	3233.31 22/2
Indonesia					
Jakarta Comp.(10/8/82)	452.20	424.49	(c)	481.22 6/1	422.13 24/3
Ireland					
ISEQ Overall(4/1/88)	1869.19	1854.84†	1859.30	1982.77 10/2	1813.59 23/1
Italy					
Banca Comm Ital (1972)	595.66	592.35	599.47	680.54 10/2	587.99 23/3
MIB General (2/1/85)	942.0	938.0	947.0	1076.00 10/2	928.00 23/3
Japan					
Nikkei 225 (16/5/49)	15630.53	15381.29	16139.95	19723.06 2/1	15381.29 3/4
Nikkei 300 (1/10/82)	236.32	231.22	241.99	287.17 2/1	229.65 24/3
Japan					
Topix (4/1/68)	1270.48	1250.61	1307.89	1589.09 2/1	1239.67 24/3
2nd Section (4/1/68)	1682.77	1675.12	1717.15	2133.66 2/1	1691.53 24/3
Malaysia					
KLSE Comp.(4/4/86)	974.03	966.31	984.07	985.24 17/2	940.87 24/1
Mexico					
IPC (Nov 1978)	(u)	1923.17	1832.83	2354.24 2/1	1447.52 27/2
Netherland					
CBS TtlRtnGen(End 83)	428.4	425.8	425.8	447.09 10/2	422.60 23/3
CBS All Shr (End 83)	268.7	267.1	267.1	280.40 10/2	265.20 23/3
New Zealand					
Cap. 40 (1/7/86)	2019.62	1998.89	1997.53	2019.62 4/4	1901.43 5/1
Norway					
Oslo SE(Ind)(2/1/83)	1062.82	1057.37	1049.52	1152.66 6/2	1036.00 10/3
Philippines					
Manila Comp (2/1/85)	2418.38	2376.63	2392.25	2805.28 3/1	2248.39 27/3
Portugal					
BTA (1977)	2734.1	2739.5	2750.5	2911.60 9/1	2682.40 26/1
Singapore					
SES All-S'pore(2/4/75)	489.13	501.06	504.76	533.06 5/1	472.90 23/1
South Africa					
JSE Gold (28/9/78)	1542.8♥	1532.3	1469.4	2023.00 2/1	1357.80 27/3
JSE Indl. (28/9/78)	6711.9♥	6655.7	6655.4	6884.40 2/1	6222.00 31/1
South Korea					
KoreaCmpEx(4/1/80)**	911.61	922.53	931.78	1027.37 2/1	886.89 28/2
Spain					
Madrid SE (30/12/85)	272.87	268.85	268.85	290.98 8/2	264.06 23/3
Sweden					
AffarsvarldnGen (1/2/37)	1493.0	1461.3	1458.7	1583.80 14/2	1439.80 29/3
Switzerland					
Swiss Bk Ind (31/12/58)	1197.59	1192.20	1193.54	1257.80 14/2	1174.83 13/3
SBC General (1/4/87)	890.66	884.92	884.96	929.91 4/1	870.59 13/3
Taiwan					
WeightedPr.(30/6/66)**	6573.54	(c)	6524.00	7124.66 3/1	6167.79 24/1
Thailand					
Bangkok SET (30/4/75)	1184.14	1188.71	1216.68	1373.85 5/1	1135.69 16/3
Turkey					
Istanbul Comp.(Jan 1986)	43080.1	41471.6	39837.3	43080.10 4/4	24644.31 23/1
WORLD					
MS Capital Int (1/1/70)$	640.8*	636.5	644.7	644.70 3/4	596.21 23/1
CROSS-BORDER					
Eurotrack 100(26/10/90)	1267.70	1252.05	1254.30	1348.30 10/2	1222.41 13/3
Euro Top-100 (26/6/90)	1168.09	1152.09	1147.16	1202.67 10/2	1114.54 10/3
JCapitlDrgns (31/12/88)	(u)	302.61	307.82	309.49 29/3	292.87 23/1
Barings Emerg.(7/1/92)	133.12	132.38	133.98	158.07 2/1	117.15 10/3

INDEX FUTURES

	Open	Sett Price	Change	High	Low	Est. vol.	Open int.
CAC-40 (200 x Index)							
Mar	1895.0	1892.0	+19.0	1904.0	1883.0	13,742	24,679
Apr	1882.0	1889.5	+18.5	1899.0	1882.0	157	9,914
DAX							
Jun	1951.00	1978.50	+35.5	1984.0	1948.0	19,966	113,508
Sep	1979.00	2001.50	+36.0	2003.5	1978.0	173	2,320
OMX							
Apr	1141.00	1160.50	+25.50	1161.00	1141.00	9,494	22,260
May	1138.50	1149.00	+31.00	1149.00	1138.50	600	880
SOFFEX							
Apr	2525.0	2536.4	+22.9	2548.0	2525.0	4,677	19,184
Jun	2491.0	2505.0	+2.0	2505.0	2491.0	18	107

** Sat Apr 1: Taiwan Weighted Price 6573.54; Korea Comp Ex 934.09. Base values of all indices are 100 except Australia All Ordinary and Mining – 500; Austria Traded, BEL20, HEX Gen., MIB Gen., SBF250, CAC40, Euro Top-100, ISEQ Overall; Toronto Comp./Metals & Minerals and DAX – all 1,000; JSE Gold – 255.7; JSE 28 Industrials – 264.3; NYSE All Common – 50 and Standard and Poor's – 10. $$ Montreal. ♦ Toronto. (c) Closed. (u) Unavailable. ‡ IBIS/DAX after-hours index: Apr 4 = 1965.68 +30.72.

US INDICES

Dow Jones	Apr 3	Mar 31	Mar 30	1995 High	1995 Low	Since compilation High	Since compilation Low
Industrials	4168.41	4157.69	4172.56	4172.56 (30/3)	3832.08 (30/1)	4172.56 (30/3/95)	41.22 (2/7/32)
Home Bonds	98.40	98.52	98.36	98.62 (31/3)	93.53 (3/1)	109.77 (18/10/93)	54.99 (1/10/81)
Transport	1625.03	1635.74	1655.07	1655.67 (30/3)	1473.19 (3/1)	1862.29 (2/2/94)	12.32 (8/7/32)
Utilities	187.71	187.65	187.71	198.74 (6/2)	183.03 (3/1)	256.48 (31/8/93)	10.50 (8/4/32)

DJ Ind. Day's high 4202.30 (4184.00) Low 4128.66 (4100.26) (Theoretical♦)
Day's high 4172.56 (4172.58) Low 4155.21 (4112.04) (Actual♦)

Standard and Poors	Apr 3	Mar 31	Mar 30	1995 High	1995 Low	Since compilation High	Since compilation Low
Composite ‡	501.85	500.71	502.22	503.90 (28/3)	459.11 (3/1)	503.90 (28/3/95)	4.40 (1/6/32)
Industrials♥	598.09	596.69	598.00	599.98 (28/3)	546.28 (3/1)	599.98 (28/3/95)	3.62 (21/6/82)
Financial	46.41	46.30	46.50	46.71 (28/3)	41.41 (2/1)	48.49 (28/9/93)	8.64 (1/10/74)
NYSE Comp.	271.49	271.04†	271.83	271.82 (28/3)	250.73 (3/1)	271.82 (28/3/95)	4.46 (25/4/42)
Amex Mkt Val	465.99	464.41	465.01	466.99 (3/4)	433.12 (6/1)	487.89 (2/2/94)	29.31 (9/12/72)
NASDAQ Cmp	818.05	817.21†	816.86	826.14 (28/3)	743.58 (3/1)	826.14 (28/3/95)	54.87 (31/10/72)

■ RATIOS

	Mar 31	Mar 24	Mar 17	Year ago
Dow Jones Ind. Div. Yield	2.64	2.65	2.69	2.81
	Mar 29	Mar 22	Mar 15	Year ago
S & P Ind. Div. yield	2.27	2.33	2.33	2.51
S & P Ind. P/E ratio	18.05	17.60	17.60	23.55

■ NEW YORK ACTIVE STOCKS

Monday	Stocks traded	Close price	Change on day
Tele Danmark	9,642,700	27¼	+¾
Telefonos	4,263,400	29¾	+1¼
Wal-Mart	4,097,300	26	+⅜
Cont Medical	3,594,400	11⅝	+3¾
E-Systems	3,496,800	63⅞	+18½
Merck	3,329,800	43½	+⅜
Compaq	3,247,000	33⅝	-1
K Mart	2,793,300	13⅜	+⅛
Motorola	2,785,800	53⅝	-¼
Horizon Hlth	2,707,900	23¼	-3½

■ TRADING ACTIVITY

● Volume (million)

	Apr 3	Mar 31	Mar 30
New York SE	282.724	352.947	385.921
Amex	14.058	27.779	23.552
NASDAQ	245.962	309.040	330.074
NYSE			
Issues Traded	2,945	2,935	2,934
Rises	1,119	971	1,307
Falls	1,061	1,237	805
Unchanged	765	727	822
New Highs	65	70	85
New Lows	13	15	6

	Open	Latest	Change	High	Low	Est. vol.	Open int.
S&P 500							
Jun	504.65	506.65	+2.05	507.20	504.15	47,475	190,207
Sep	509.80	511.30	+2.10	511.60	509.60	123	8,000
Nikkei 225							
Jun	15490.0	15690.0	+260.0	15790.0	15300.0	31,883	123,705
Sep	15740.0	15740.0	-	15740.0	15740.0	6	29

Open interest figures for previous day.

† Correction. * Calculated at 15.00 GMT. ● Excluding bonds. ‡ Industrial, plus Utilities, Financial and Transportation. ♦ The DJ Ind. index theoretical day's highs and lows are the averages of the highest and lowest prices reached during the day by each stock; whereas the actual day's highs and lows (supplied by Telekurs) represent the highest and lowest values that the index has reached during the day. (The figures in brackets are previous day's). ♥ Subject to official recalculation.

■ TOKYO - MOST ACTIVE STOCKS: Tuesday, April 4, 1995

	Stocks Traded	Closing Prices	Change on day
Nippon Steel	5.9m	321	+1
Tosoh	5.0m	420	+15
Bank of Tokyo	4.8m	1390	+70
Hitachi	4.1m	877	+27
Mitsubishi Bank	3.5m	1850	-110
NEC Corp	3.2m	903	-1
Mitsubishi Hvy	3.2m	610	+15
Matsushita	3.1m	1380	+50
Nomura Secs	3.0m	1630	+40
Toshiba	2.9m	573	+11

4 pm close April 4

NEW YORK STOCK EXCHANGE COMPOSITE PRICES

1995 High	Low	Stock	Div	Yld. %	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
14 1/4	12 1/8	AAR	0.48	3.8	21	188	12 5/8	12 1/2	12 5/8	+1/8
23 5/8	19 1/4	ALPharmaA	0.18	0.8	290	693	u23 5/8	23 1/4	23 1/4	-1/8
38 1/4	35	AMP	0.92	2.5	21	8029	37 1/4	38 1/2	37 1/8	+5/8
65 7/8	53 3/8	AMR			29	8581	u66 7/8	65 1/4	66 3/4	+1 7/8
47 7/8	41 7/8	ASA	1.71	3.7	30	387	46 3/4	46 1/4	46 1/4	-1/2
38 3/8	30 3/4	AbbtL	0.84	2.2	20	10249	37 1/2	36 1/2	37 1/2	+1 1/8
14 1/2	12	Abitibi Pr	0.50	3.4	19	170	u14 1/2	14 1/8	14 1/2	+1/2
24 3/8	22	ABM Ind	0.60	2.8	12	134	22 3/8	d21 3/4	21 3/4	-5/8
16 5/8	14 1/4	Acpincoln			8	86	14 3/4	14 5/8	14 3/4	+1/8
28	21 7/8	ACE Ltd	0.44	1.7	8	1287	u28 1/2	25 3/4	28 1/4	+1/4
9 3/4	8 1/8	ACM Gvt In x	0.90	10.9	7	572	8 1/4	d8 1/8	8 1/4	+1/8
7 1/2	6 1/2	ACM GvOpp x	0.66	10.0		121	6 3/4	6 5/8	6 5/8	-1/8
7 1/2	5 3/4	ACM Gvt Sp x	0.75	12.2		240	6 1/4	6	6 1/4	-1/8
8 5/8	7 1/4	ACM Gvt Se x	0.90	12.4		249	7 3/8	d7 1/4	7 1/4	
8 1/2	7 5/8	ACM Mun x	1.08	13.7		126	7 7/8	d7 5/8	7 7/8	+1/8
7 5/8	7 1/8	ACM Managd x	0.72	10.1		109	7 1/8	d7 1/8	7 1/8	
17	10 1/4	AcmeCh	0.48	2.9	9	182	16 1/2	16	16 1/2	+1/8
21 1/2	12 3/8	Acme Elect			22	402	19 7/8	19 1/4	19 3/8	+1/4
34 1/2	31 3/8	Acordia	0.72	2.2	15	11	32 5/8	32 1/2	32 5/8	+1/8
11 3/8	8 5/8	Actava	0.36	3.7	7	66	9 3/4	9 5/8	9 5/8	-1/8
18 3/4	11 1/8	Acuson			18	371	11 3/4	11 1/2	11 3/4	+1/4
16 5/8	15 5/8	Adams Expr	0.36	2.2	0	170	16 1/4	16 1/8	16 1/4	+1/8
68 1/2	53	Ad Micro	3.00	4.5		66	66	66	66	
35 7/8	25	AdvMic	3.00	8.6	11	14235	35	34 3/8	34 3/4	+5/8
6 3/8	5	Advest Grp	0.16	2.8	26	42	5 7/8	5 3/4	5 3/4	
20 1/4	16 1/2	Advo Inc	0.10	0.5	16	81	u20 5/8	20 1/4	20 1/4	+1/4
71 3/4	63 7/8	Aegon ADR	1.47	2.1	13	415	71	70 5/8	70 5/8	-5/8
4 3/8	3 3/8	Aeroflex			5	67	4	3 7/8	3 7/8	-1/8
58 1/8	46 3/4	AetnaL	2.76	4.7	14	3160	u58 7/8	58 3/8	58 5/8	+1/2
42 3/4	31 7/8	Aflac	0.46	1.1	14	1005	41 1/8	40 1/8	41	+1/2
18 5/8	16	Ahmanson	0.88	4.6	11	1818	u19	18 3/8	19	+3/4
1 3/8	13/16	Aileen Inc			0	90	13/16	7/8	7/8	
52 1/4	43 7/8	AirPrC x	0.98	1.9	23	1893	51 3/4	50 7/8	51 3/4	+7/8
24 1/4	18 3/4	Airbne Frt	0.30	1.4	11	246	20 7/8	20 3/4	20 7/8	
27	18 5/8	Airgas Inc			29	155	u27	26 1/8	26 1/2	-1/2
15	13 3/8	Airlease x	1.88	12.7	10	27	14 3/4	14 5/8	14 3/4	+1/8

Continued on next page

صورة من الأصل

NYSE COMPOSITE PRICES

4 pm close April 4

AMEX COMPOSITE PRICES

4 pm close April 4

NASDAQ NATIONAL MARKET

4 pm close April 4

Stock	Div.	P/ E	Sls 100s	High	Low	Last	Chng
- K -							
K Swiss	0.08	6	104	15	14½	14⅝	
Kaman Cp	0.44	11	227	11¼	11	11	-1/16
Kelly Sv	0.72	22	239	36	35½	35½	-¼
Kentucky	0.11	25	4	6⅞	6⅞	6⅞	-⅜
Kimball	0.84	14	92	26¼	25¼	25¾	+¼
KLA Instr		42	8427	63¾	60	60½	-2¾
Koll A		0	351	13/32	d11/32	⅜	
Komag Inc		12	7980	u33½	32⅞	33	+⅜
Kulicke S		19	2352	27⅝	26⅞	27 3/16	+½
- L -							
Labone	0.72	30	25	13	d13	13	
Ladd Furn	0.12	26	649	5 1/16	4 15/16	5	+1/16
Lam Rsch		20	5676	45¾	43¼	43¼	-1¾
Lancaster	0.56	16	208	35¾	35	35¾	+¼
Lance Inc	0.96	19	61	17¼	16¾	16¾	-⅜
LandmkGph		133	2901	19	18¼	18⅝	+⅛

FINANCIAL TIMES Wednesday April 5 1995

AMERICA

Carmakers fall as Dow hits new high

Wall Street

US blue chips resumed their push into record territory yesterday morning as the dollar stabilised against the D-Mark and the Japanese yen and the bond market moved ahead, *writes Lisa Bransten in New York.*

By 1 pm the Dow Jones Industrial Average was 16.60 higher at 4,185.01, surpassing last Thursday's record close of 4,172.56. The Standard & Poor's 500 rose 1.17 at 503.02 and the American Stock Exchange composite was up 0.42 at 466.41. Meanwhile the Nasdaq composite was off 1.51 at 816.50. NYSE volume was 184m shares.

Stocks and bonds received some support yesterday from a stable dollar.

Also aiding the bond market was the release of data showing that construction spending declined by 0.5 per cent in February after a 0.5 per cent decline in January, which added to the increasingly accepted belief that the US economy was slowing.

Among gaining issues in the Dow were Minnesota Mining & Manufacturing, which rose $1¼ at $58¾, Procter & Gamble, $1 at $67⅛ and International Paper, $1 higher at $75⅞.

The big three auto makers lost ground yesterday after Chrysler and General Motors gave signs of weakening sales. Both companies reported late on Monday that total vehicle sales were down 9 per cent in March over the same time period last year. Ford was expected to release its March sales figures later yesterday afternoon. Mr Robert Eaton, Chrysler's chairman, also warned that incentives to attract buyers would harm the company's results for the first six months of this year. Chrysler shed $2 at $40, General Motors was $1⅜ lower at $43½ and Ford fell $⅜ at $26⅞.

Sybase contributed to the weakness on the Nasdaq composite as the computer software company lost nearly 39 per cent of its value. Its shares tumbled $15¼ at $24 after at least four securities houses lowered their ratings; officials announced late on Monday that first quarter earnings were likely to be well below most analysts' estimates.

Timberland, the boot company, also lost ground after issuing a profits warning. Shares in the company fell $3⅜ at $22⅛. Moorco added 55 per cent to its value as shares rose $7½ at $21⅛ after FMC offered to buy the company for at least $223m or $20 a share.

Canada

Toronto erased early gains at midday with the losses led by consumer products and gold shares. The TSE-300 composite index fell 12.71 to 4,264.53 in volume of 26.68m shares.

Shares in Seagram continued to drag the consumer products sector lower. The company was C$2 lower at C$40⅛ on continued speculation that it might sell back its stake in Dupont.

The gold and precious metals group fell as Placer Dome lost C$⅝ to C$32⅞.

Brazil jumps 5.6%

Brazilian stocks jumped 5.6 per cent in midday trade as investors bought selectively in a technical rebound after the 14.2 per cent fall over the previous five sessions. The Bovespa index was up 1,611 at 30,547 in turnover that picked up to R$121.7m ($135.2m), compared with R$161.5m in the whole of Monday's session.

Blue chips led the rally. Telebras preferred gained 7.2 per cent to R$25.30, Vale do Rio Doce preferred added 4.3 per cent to R$122 and Petrobras preferred jumped 7.5 per cent to R$64.50.

MEXICO CITY rose 2.8 per cent in late morning trading as foreign investors continued their mild buying incursion. The IPC index was 53.00 ahead at 1,976.17, with the strength of Mexican stocks on Wall Street helping the push.

MARKETS IN PERSPECTIVE

	% change in local currency †				% change sterling †	% change in US $ †
	1 Week	4 Weeks	1 Year	Start of 1995	Start of 1995	Start of 1995
Austria	-2.15	-6.52	-16.05	-10.25	-2.36	+1.65
Belgium	+1.01	-1.37	-10.15	-4.27	+4.13	+8.41
Denmark	-2.22	-6.95	-18.64	-7.81	-0.67	+3.40
Finland	+0.85	-5.68	-1.12	-12.99	-7.84	-4.05
France	+2.30	+3.59	-10.32	-0.18	+6.70	+11.07
Germany	-0.08	-8.94	-12.36	-9.59	-1.66	+2.39
Ireland	+1.31	-0.04	+5.75	+0.06	+1.49	+5.68
Italy	+0.55	-3.36	-16.68	-4.33	-12.17	-8.55
Netherlands	+0.21	-1.55	-1.11	-3.74	+4.86	+9.18
Norway	-0.28	-3.20	-8.48	-10.75	-5.42	-1.54
Spain	+1.62	-4.49	-14.17	-5.67	-5.34	-1.45
Sweden	+0.26	-0.62	+7.47	+0.39	-2.74	+1.26
Switzerland	-0.71	-2.74	-9.42	-4.40	+6.73	+11.10
UK	-0.34	+3.78	+0.25	+2.12	+2.12	+6.33
EUROPE	+0.21	-0.48	-6.09	-2.28	+1.41	+5.56
Australia	+0.20	-0.27	-4.92	+0.42	-9.57	-5.84
Hong Kong	+1.61	+3.86	-7.30	+6.35	+2.21	+6.42
Japan	+5.82	-3.81	-15.60	-15.98	-6.82	-2.98
Malaysia	+3.22	-0.85	+4.31	+0.91	-2.28	+1.75
New Zealand	+3.57	+1.14	+3.43	+5.17	+3.18	+7.44
Singapore	+3.17	+0.23	+7.41	-5.61	-6.37	-2.51
Canada	-0.34	+6.07	+4.34	+3.59	-0.50	+3.59
USA	-0.10	+2.90	+12.59	+8.91	+4.61	+8.91
Mexico	+5.72	+21.28	-16.70	-17.71	-42.02	-39.64
South Africa	+1.06	+0.47	+6.19	-11.33	-2.95	+1.03
WORLD INDEX	+1.66	+0.02	-2.55	-2.75	-0.74	+3.34

† Based on March 31st 1995.

EUROPE

Bourses stir on short covering, recovery in $

Bourses stirred yesterday and, in some European capitals, a little action made a lot of difference to share prices, *writes Our Markets Staff.*

Highlights included a German extension of Monday's short covering; Italy's gains following a rebound in the lira; and Spain's rescue from Monday's lows in trading volume.

FRANKFURT saw German stock market turnover rise only marginally, from DM4.7bn to DM5.3bn. The Dax index was more noteworthy, closing the post bourse 30.72, or 1.6 per cent higher at an *Ibis-indicated* 1,965.68. Dealers said that the market was heavily influenced by gains in leading stocks like Allianz, Daimler and Deutsche Bank, and less by the day's results from lesser names like Henkel and Bayernhypo, good though they were.

Allianz, which tends to lead the market into new ground, rose DM54 to DM2,450 as pundits talked about a Dax rise to 2,000. Other voices were more cautious, saying that the key index could hit 1,800 before it goes higher again.

Daimler rose DM11.20 to DM639.70 ahead of results later this week, cheered by last week's better than expected performance at Volkswagen; but talk of a revamp and relaunch of the world-famous Mini left Rover's new parent, BMW, flat at DM694 after talk that currency fluctuations *might have hit the group.*

FT-SE Actuaries Share Indices

Apr 4 — THE EUROPEAN SERIES

Hourly changes	Open	10.30	11.00	12.00	13.00	14.00	15.00	Close
FT-SE Eurotrack 100	1262.45	1264.05	1263.37	1264.36	1269.12	1270.72	1268.54	1267.70
FT-SE Eurotrack 200	1371.29	1372.83	1373.92	1373.88	1380.12	1380.03	1378.93	1375.05

	Apr 3	Mar 31	Mar 30	Mar 29	Mar 28
FT-SE Eurotrack 100	1252.05	1254.30	1268.27	1236.95	1242.45
FT-SE Eurotrack 200	1360.10	1362.27	1376.38	1349.07	1353.50

Base 1000 (26/10/90); High/day: 100 - 1271.22; 200 - 1381.58 Low/day: 100 - 1262.45 200 - 1371.29 † Partial

PARIS moved up late to close with the CAC-40 index 18.77 higher at 1,882.77 on turnover of FFr3.6bn. Good relations with analysts lifted a number of big stocks.

Total, the oil major, rose FFr13.20 to FFr303 after a well-received analysts' meeting in London; Saint-Gobain, up FFr14 at FFr609, was boosted by the chairman's forecast of further profits growth at an analysts' meeting late on Monday; Lyonnaise des Eaux rose FFr15.60 to FFr468.10 on a Goldman Sachs recommendation; and Imetal gained FFr21.50 to FFr492.50 as Nomura put it on the buy list after a 20 per cent underperfomance of the past six months.

ZURICH was encouraged by the dollar's firmer tone and the SMI index rose 25.1 to 2,536.2, *although trading remained* quiet and volumes low.

Financials profited as the average yield on government bonds fell below 5 per cent for the first time since June 1994. SBC, launching a roadshow for analysts in the US, rose SFr4 to SFr376 and CS Holding was SFr6 higher at SFr469. Among insurers, Winterthur rose SFr18 to SFr657 and Zurich SFr25 to SFr1,178.

Schindler, the lift manufacturer, plunged 17.8 per cent after it warned of lower 1995 profits and said that it was considering a large acquisition. The certificates, widely held by London investors, fell SFr245 to SFr1,130. Brown Boveri, however, rose SFr13 to SFr1,083 as the company prepared to launch its own roadshow in the US this week.

Among stronger pharmaceuticals, Ciba rose SFr12 to SFr772 after Merrill Lynch issued a buy recommendation.

MILAN took its cue from the lira with the Comit index up 4.33 at 596.68, while the real time Mibtel index put on 110 or 1.2 per cent at 9,568.

Trading in Fiat and the telecommunications issues accounted for 30 per cent of turnover, weak at L390bn.

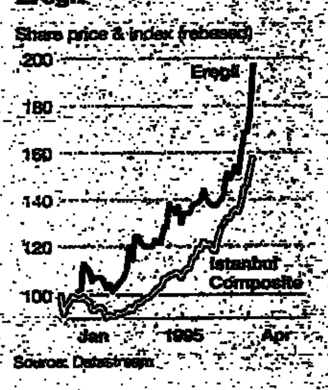
Fiat rose L54 to L6,416 while *Telecom Italia* was L87 higher at L4,044 and Stet gained L59 to L4,393.

Olivetti jumped L39 to L1,567 on short covering after the recent sharp falls.

AMSTERDAM slipped back from its highs, the AEX index closing 2.53 better at 396.31 after signs of options-related selling and US selling of some majors. The transport company, Frans Maas, paid heavily for Monday's news of a loss and no dividend for 1994, the shares falling Fl 7.30, or 17 per cent to Fl 36.20.

MADRID was impressed by the effect of short covering on the dollar, futures climbed and the general index rose 4.22, or 1.6 per cent to 272.87. Turnover nearly doubled at Pta25.3bn.

Eregli



Source: Datastream

Asturiana's hopes for a profit in 1995 took the zinc producer up nearly 4 per cent at one stage, but it subsided to close Pta10 higher at Pta1,135. In mid-privatisation, Repsol, the oil major, scored one of the biggest advances with a gain of Pta55 to Pta3,690.

STOCKHOLM was supported by falling bond yields and the general bourse uptrend, the Affärsvärlden General index closing 31.7, or 2.2 per cent higher at 1,493.0. Forestry outperformed other sectors, rising 2.7 per cent with Stora up SKr13 at SKr451 and Modo SKr10 higher at Skr345.

Ericsson B hit a new 1995 high of SKr475 during the day, closing SKr12 higher at SKr473 on expectations that the telecoms group could do better than at first thought in the allocation of US mobile telephone licences.

ISTANBUL was unstoppable, the composite index rising 1,618.49 or 3.9 per cent to an all time high of 43,090.17. Turnover was also a record, at TL14,690bn.

Eregli, Turkey's partially state-owned and sole flat steel producer, raised its output prices by an average 7.1 per cent from yesterday and its shares rose TL700, or 12.9 per cent to TL7,000.

OSLO rose on lower debt market yields, the all share index closing 12.58, or 2.1 per cent higher at 622.52.

HELSINKI, meanwhile, said that it was unaffected by news that a five-party coalition government headed by social democrats might be on the way. The Hex index jumped 46.3, or 2.9 per cent to 1,659.5, the banking and finance sector leading with a 7.6 per cent gain.

Written and edited by William Cochrane and Michael Morgan

ASIA PACIFIC

Nikkei up 1.6%, hopes of action to steady markets

Tokyo

Rising expectations of government measures to stabilise Japanese financial markets led to a rise in futures and to short covering, and the Nikkei index recovered 1.6 per cent, *writes Emiko Terazono in Tokyo.*

The 225 average rose 249.24 to 15,630.53 following comments by government ministers after a cabinet meeting, expressing concern over the recent surge in the yen and the sharp fall in share prices.

Arbitrage selling had initially depressed share prices, and the Nikkei fluctuated between a wide range of 15,256.06 and 15,755.46.

The minister for international trade and industry, Mr Ryutaro Hashimoto, called for a cut in the tax on securities transactions and brokerage fees, while the finance minister, Mr Masayoshi Takemura, said that the government was considering an economic stimulus package to counter the negative effects of the soaring yen.

The Topix index of all first section stocks rose 19.87, or 1.6 per cent to 1,270.48 while the Nikkei 300 added 4.1, or 1.8 per cent to 235.32. Advances led declines by 767 to 251 with 103 unchanged.

In London, the ISE/Nikkei 50 index closed up 2.02 at 1051.94.

Volume totalled 287m shares against 313m. Overseas investors remained sidelined while dealers covered their short positions. Small lot buying by individual investors and banks also supported shares.

Utilities were higher on the yen's rise. Tokyo Electric Power rose Y50 to Y2,690. Arbitrage buying lifted steels. Nippon Steel, the most active issue, closed up Y1 at Y321.

Bank of Tokyo rose Y70 to Y1,390 while Mitsubishi Bank, one of the few losers in the banking sector, fell Y110 to Y1,850.

The two banks, which announced their merger last week, yesterday set the merger ratio at one Bank of Tokyo share for 0.8 of a Mitsubishi share, prompting selling of Mitsubishi.

High-technology stocks recovered with Matsushita Electric Industrial up Y50 to Y1,380 and Sony gaining Y110 to Y4,210. However, some auto makers were lower with Honda Motor down Y10 to Y1,390 and Nissan Motor losing Y6 to Y626.

Brokers, which were sold off heavily on Monday, recovered ground. The sector rose 3.7 per cent, with Nomura Securities up Y40 to Y1,630 and Daiwa Securities gaining Y35 to Y991.

In Osaka, the OSE average rose 277.23 to 17,601.76 in volume of 7.2m shares. Nintendo, the video game maker, fell Y390 to Y4,670, on selling triggered by news of a press conference.

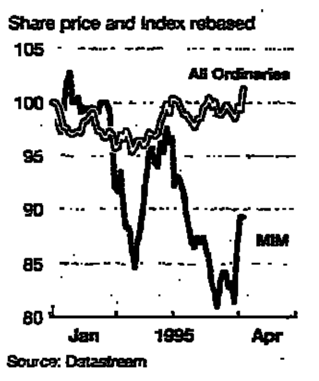
After hours, the video game maker said that the strength of the yen, and weak overseas markets meant that it would be unable to reach its earnings forecasts for the year to March 31 last.

Roundup

A more positive mood emerged in much of the region.

HONG KONG moved ahead on selective afternoon buying by foreign institutions but trading remained quiet with leading buyers reluctant to commit fresh funds.

MIM Holdings



Source: Datastream

The Hang Seng index rose 91.49 to 8,491.93, after breaching the 8,500 level briefly in late trade.

Banks rebounded after recent sharp falls with Hang Seng Bank gaining HK$1 to $51.50 and HSBC Holdings up $1.25 to $86.25. Swire Pacific rose$1.50 to $52.50.

SYDNEY climbed by 1.9 per cent, the All Ordinaries Index closing 36.8 higher at 1,936.3 although dealers noted that, with limited stock available, many institutional investors bought the futures contract, pushing it up by 42 points, or 2.2 per cent at 1,980.

MIM rose 9 cents to A$2.01 following a takeover bid for its partner in the Bajo de la Alumbrera copper-gold project in Argentina.

WELLINGTON regarded the December quarter GDP data as positive evidence of economic slowdown and the NZSE-40 Capital index rallied 20.73 to its high for the year of 2,019.62, with forestry stocks continuing to lead the way higher.

Among recently neglected issues, Fletcher put on 8 cents to NZ$3.77 and Carter 6 cents to $3.52.

KUALA LUMPUR saw a technical rebound after Monday's sharp fall and the composite index rose 7.72 at 974.03 although volume was held at a low 78.6m shares.

Repco Holdings was among the biggest winners, rising 70 cents to M$11.10 on rumours that it might be about to call off a deal that would dilute its equity.

MANILA was lifted by strong demand for PLDT which drove the composite index 41.75 higher to 2,418.38, but volume dipped to 946.4m shares.

PLDT rose 50 pesos to 1,590 pesos while PNB ended 2.7 per cent up at 227 pesos, Petron rose 5.6 per cent to 18.75 pesos and Filinvest Land gained 8.8 per cent to 7.40 pesos.

BOMBAY saw moderate buying by local and foreign mutual funds, combined with a respite in selling pressure by Unit Trust of India, the country's largest mutual fund. The BSE-30 share index closed 80.11 or 2.4 per cent higher at 3,394.42.

The mood was again helped by hopes that a forward trading mechanism would be introduced by the Securities and Exchange Board of India next week.

Tata Engineering and Locomotive Company (Telco), actively bought by foreign mutual funds, gained Rs25 or 5.8 per cent to Rs460.

KARACHI was higher in heavy volume on institutional demand, the KSE-100 share index rising 22.27 or 1.3 per cent to 1,684.45.

SEOUL closed lower across the board in extremely thin trading with investors worried about the outlook.

S Africa industrials firm

Industrial shares posted strong gains in Johannesburg on steady institutional and offshore interest, but golds ended off their best levels after bullion's strong run faltered.

Dealers said that a fall in the bullion price brought sellers in early afternoon trade. But subsequently, they had to cover their short positions as bullion turned up again.

The overall index finished 68.7 better at 5,395.2, industrials rose 56.2 to 6,711.9; golds added 10.3 to 1,542.6 after a near-11 per cent rally in the previous two sessions.

FT-ACTUARIES WORLD INDICES

Jointly compiled by The Financial Times Ltd., Goldman, Sachs & Co. and NatWest Securities Ltd. in conjunction with the Institute of Actuaries and the Faculty of Actuaries

NATIONAL AND REGIONAL MARKETS Figures in parentheses show number of lines of stock	MONDAY APRIL 3 1995 US Dollar Index	Day's Change %	Pound Sterling Index	Yen Index	DM Index	Local Currency Index	Local % chg on day	Gross Div. Yield	FRIDAY MARCH 31 1995 US Dollar Index	Pound Sterling Index	Yen Index	DM Index	Local Currency Index	DOLLAR INDEX 52 week High	52 week Low	Year ago (approx)
Australia (83)	160.91	-0.4	147.55	87.67	114.80	145.85	-0.5	4.08	161.62	147.10	88.27	114.99	146.55	180.82	157.95	163.33
Austria (27)	186.38	0.3	170.91	101.54	132.97	132.90	0.6	1.29	185.75	169.06	101.45	132.15	132.10	198.89	167.46	180.77
Belgium (35)	183.45	0.5	168.22	99.95	130.88	127.66	0.9	4.15	182.59	166.19	99.72	129.91	126.56	183.45	161.53	163.67
Brazil (28)	108.06	-3.3	99.11	58.89	77.11	179.16	-2.9	1.84	111.80	101.75	61.06	79.54	184.59	-	-	-
Canada (103)	132.90	-0.8	121.87	72.41	94.82	134.77	-1.0	2.59	134.04	121.99	73.20	95.36	136.15	140.25	120.54	129.89
Denmark (33)	261.35	0.4	239.65	142.39	186.46	193.03	0.5	1.64	260.38	236.99	142.20	185.25	192.15	275.27	236.61	280.63
Finland (24)	180.12	0.9	165.17	98.13	128.51	163.00	1.3	1.46	178.42	162.39	97.44	126.94	160.95	201.41	133.88	141.42
France (101)	181.39	-0.1	166.33	98.82	129.41	136.87	0.1	3.16	181.66	165.34	99.21	129.25	136.67	181.66	157.79	167.91
Germany (59)	146.90	0.1	134.71	80.04	104.80	104.80	0.4	2.11	146.74	133.55	80.14	104.40	104.40	154.61	132.06	135.17
Hong Kong (55)	339.49	-2.2	311.31	184.96	242.21	337.00	-2.2	3.96	347.07	315.89	189.55	246.93	344.54	418.42	277.40	374.67
Ireland (16)	215.23	-1.2	197.36	117.26	153.56	187.54	-0.4	3.82	217.94	198.36	119.03	155.06	188.27	217.94	177.56	181.12
Italy (58)	67.09	-2.6	61.52	36.55	47.87	86.21	-1.2	1.77	68.86	62.67	37.60	48.99	87.27	97.78	65.45	86.73
Japan (484)	145.88	-4.2	133.77	79.48	104.08	79.48	-4.4	0.96	152.27	138.59	83.16	108.34	83.16	170.10	136.95	151.47
Malaysia (97)	479.45	-1.7	439.65	261.21	342.07	466.21	-2.0	1.69	487.76	443.93	266.38	347.03	475.73	594.76	398.16	447.97
Mexico (18)	886.67	3.7	813.05	483.07	632.58	6567.91	4.7	1.65	854.72	777.93	466.80	608.10	6275.23	2414.12	647.81	2051.85
Netherland (19)	235.55	-0.5	216.00	128.33	168.06	165.30	0.0	3.79	236.80	215.52	129.33	168.48	165.34	236.80	191.28	192.45
New Zealand (14)	75.94	0.3	69.64	41.38	54.18	61.52	0.1	4.79	75.69	68.89	41.34	53.85	61.46	77.20	62.05	63.10
Norway (33)	210.56	0.3	193.07	114.71	150.22	175.92	0.7	2.40	209.88	191.02	114.63	149.32	174.68	216.03	177.53	193.23
Singapore (44)	359.41	-1.2	329.58	195.82	256.43	233.15	-1.4	1.84	363.66	331.00	198.62	258.74	236.58	401.38	297.62	304.32
South Africa (59)	342.65	0.7	314.20	186.68	244.46	268.55	1.0	2.53	340.17	309.61	185.78	242.02	265.91	342.65	205.55	233.10
Spain (38)	129.50	-0.4	118.75	70.55	92.39	124.18	0.0	4.44	130.04	118.35	71.02	92.52	124.13	150.21	124.10	138.43
Sweden (48)	234.70	0.3	215.22	127.87	167.45	255.86	0.2	2.25	234.03	213.01	127.82	166.51	255.34	247.40	196.70	202.25
Switzerland (47)	184.04	0.3	168.76	100.27	131.30	128.13	0.0	1.96	183.53	167.04	100.23	130.57	128.12	184.04	149.91	160.00
Thailand (46)	137.55	-2.8	126.13	74.94	98.14	131.38	-2.9	3.21	141.48	128.77	77.27	100.66	135.35	-	-	-
United Kingdom (203)	205.93	-0.6	188.83	112.19	146.92	188.83	0.1	4.34	207.16	188.55	113.14	147.39	188.55	207.16	181.11	187.05
USA (511)	204.97	0.2	187.95	111.67	146.23	204.97	0.2	2.77	204.49	186.11	111.68	145.48	204.49	205.79	176.95	181.63
Americas (860)	187.48	0.2	171.91	102.14	133.75	157.49	0.2	2.74	187.12	170.31	102.20	133.13	157.19	-	-	-
Europe (741)	177.76	-0.3	163.00	96.85	126.82	147.40	0.1	3.29	178.36	162.33	97.41	126.90	147.21	178.36	160.59	163.95
Nordic (138)	226.98	0.4	208.14	123.66	161.94	202.53	0.6	2.03	226.06	205.75	123.46	160.83	201.58	235.72	197.70	199.79
Pacific Basin (823)	154.19	-3.8	141.39	84.01	110.01	89.64	-4.0	1.34	160.22	145.83	87.51	113.99	93.35	176.86	145.93	159.44
Euro-Pacific (1564)	163.92	-2.2	150.31	89.30	116.94	111.47	-2.2	2.22	167.68	152.62	91.58	119.30	113.93	175.14	154.73	161.17
North America (614)	200.51	0.2	183.86	109.24	143.05	200.20	0.2	2.76	200.12	182.14	109.29	142.38	199.83	201.34	175.67	178.41
Europe Ex. UK (538)	158.83	-0.2	145.64	86.53	113.31	124.48	0.1	2.70	159.12	144.83	86.90	113.21	124.33	159.12	144.12	147.79
Pacific Ex. Japan (339)	235.64	-1.4	216.08	128.38	168.12	207.81	-1.6	3.32	239.02	217.55	130.54	170.06	211.03	273.13	211.19	237.86
World Ex. US (1772)	164.41	-2.1	150.76	89.57	117.29	114.82	-2.0	2.23	167.97	152.88	91.74	119.51	117.21	176.65	155.42	162.19
World Ex. UK (2080)	173.77	-1.3	159.35	94.68	123.98	136.43	-1.4	2.22	176.13	160.31	96.19	125.31	138.31	178.59	163.46	165.78
World Ex. Japan (1799)	194.54	-0.1	178.39	105.99	138.79	180.27	0.1	2.99	194.76	177.26	106.37	138.56	180.16	194.76	176.34	178.22
The World Index (2283)	176.58	-1.3	161.92	96.20	125.98	140.98	-1.2	2.43	178.85	162.78	97.68	127.24	142.70	180.80	165.92	167.67

PLEASE NOTE: Amendments to indices 3/4/95 applied to Norway and related regional indices. Vard (Norway) has been deleted 3/4/95. Latest prices were unavailable for this edition.

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